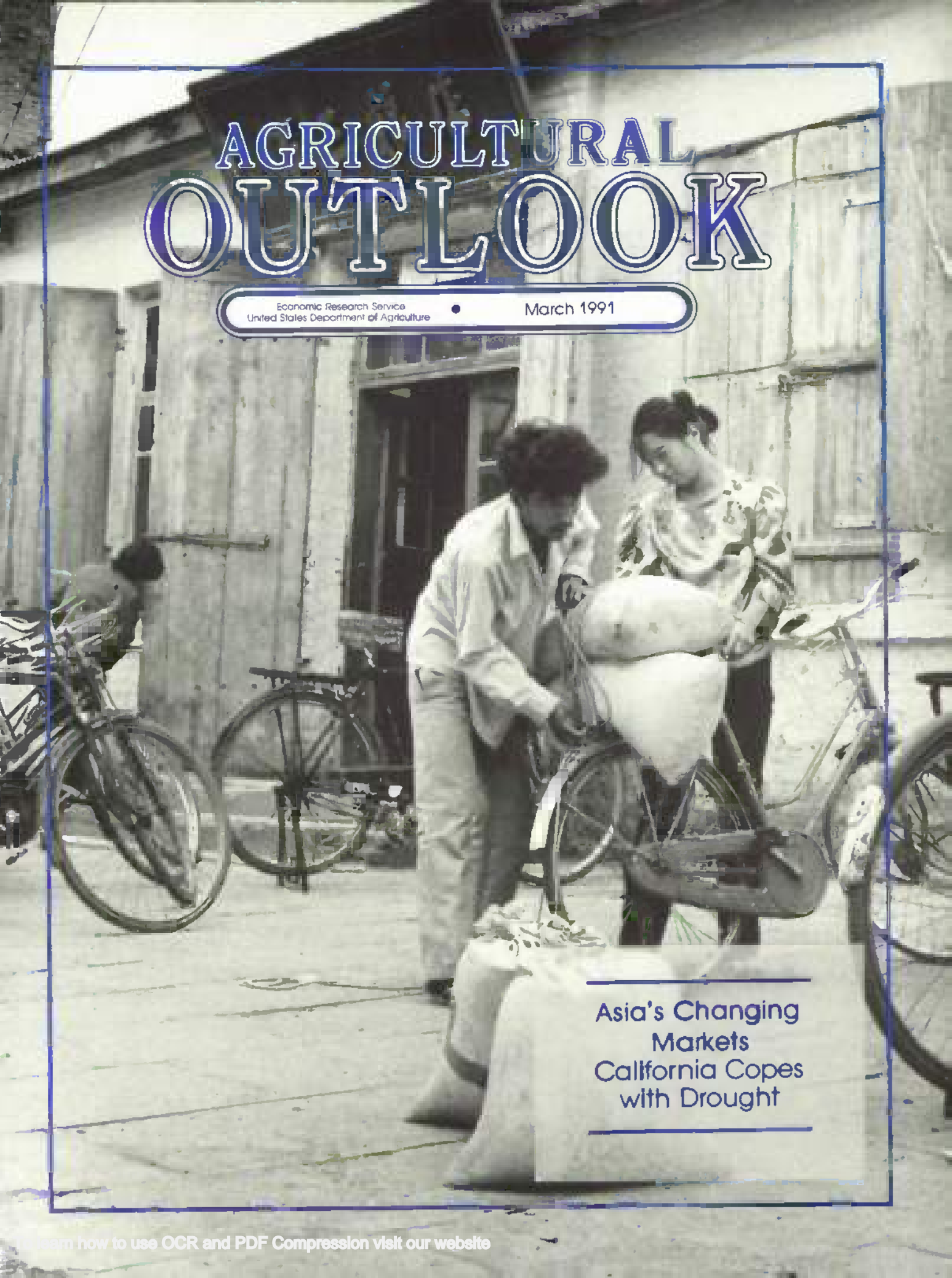


AGRICULTURAL OUTLOOK

Economic Research Service
United States Department of Agriculture

March 1991



Asia's Changing
Markets
California Copes
with Drought

AGRICULTURAL OUTLOOK

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The contents of this magazine have been approved by the World Agricultural Outlook Board, and the summary was released February 20, 1991. Price and quantity forecasts for crops are based on the February 11 World Agricultural Supply and Demand Estimates.

Materials may be reprinted without permission. *Agricultural Outlook* is printed monthly except for the January-February combined issue.

Annual subscription: \$26 U.S., \$32.50 foreign (includes Canada). Order from ERS-NASS, P.O. Box 1608, Rockville, MD 20849-1608. Or call, toll free, 1-800-999-6779 (8:30-5:00 E.T.). Make check payable to ERS-NASS.

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The next issue of *Agricultural Outlook* (AO-173) is scheduled for mailing on April 4, 1991. If you do not receive AO-173 by April 20, call the managing editor at (202) 219-0494 (be sure to have your mailing label handy). The full text of AO-173 will also be distributed electronically; additional information on this is available at (202) 447-5505.

News Of Early Planting Intentions, Farm Credit, Food Prices, Soviet Reform, China's Grain Crops, and East Asian Markets

According to a special early-season survey, U.S. farmers intend to plant 4 percent more corn, 1 percent more soybeans, 2 percent more rice, 18 percent more cotton, 19 percent more sorghum, and 36 percent more sunflowers this spring than in 1990. However, spring wheat area will slip 13 percent, farmers said. For the first time, the shifts reflect farmers' expectations of prices and costs under the new flexibility provisions of the 1990 farm act.

Combined with a 10-percent drop in winter seedings last fall, total wheat area likely will be down 11 percent. Spring wheat area will be down proportionately more because spring wheat producers will take greater advantage of flexibility provisions to plant other crops. And wheat output probably will decline more than area would suggest because farmers are not expected to harvest as much of planted area as last year and yields probably will not match 1990's record.

California's drought may keep some farmers from reaching their early intentions—especially for cotton and rice. The state is the second largest producer of both crops. Growers there are enduring one of the state's longest and most severe droughts. And this year has been among the driest ever.

Among California livestock producers, those with forage-based operations will be hit the hardest. Output of many field and forage crops will be down sharply and prices will rise. Still, the state's production of fruits and vegetables is expected to be near normal because some water will be diverted from field crops, and many growers depend on groundwater and water from the Colorado River Basin.

Farm lenders, most notably commercial banks, are showing signs of excess capacity. Creditworthy farmers wishing to



expand will be able to secure financing on more favorable terms than last year.

However, farmers remain cautious about taking on additional debt. Adjusted for inflation, U.S. land values have been stable and farm income is forecast to decline slightly this year. Moreover, planted area is expected to remain fairly steady while livestock supplies probably will show mild growth. So, in real terms, farmers as a group will use less credit in 1991 than a year earlier. Nominal farm debt may rise, though.

U.S. retail food prices are expected to rise 2-5 percent in 1991. That's unchanged from USDA's first forecast released late last November. The forecast is consistent with the current economic contraction, the Gulf war, and the freeze-damaged California fruit crops. But a deepening of the California drought would add some uncertainty.

For the Soviet Union, progress toward substantial reform of the economy has stalled. There is strong broad-based resistance to radical changes that would move the nation to a market system. With market reformers in retreat, a reassertion of central control appears inevitable.

There is little reason to expect much improvement in Soviet agricultural production, though recent proposed retail price increases would reduce the amount demanded. This would point to a modest decline in Soviet agricultural imports. Moreover, if the USSR's general economic situation continues to deteriorate, forecasts of Soviet imports based on the nation's supply and use trends are likely to be too high.

China produced back-to-back record grain crops during the past 2 years after launching an all-out effort to revive output. The reforms involved raising procurement prices, recentralizing input distribution, and issuing orders regarding production. The bumper crops mean China has been able to cut wheat imports and—to the detriment of U.S. exports to Asia—boost corn exports. However, China's government foresees grain output leveling off this year.

East Asian agricultural trade will post strong gains in the 1990's, and the composition is likely to shift as well. The move toward more high-value imports—meats, fruits, vegetables, and processed foods—and away from purchases of grains, cotton, and hides, is expected to accelerate as the decade progresses.

However, some substantial trade barriers will continue to limit East Asia's trade growth in the 1990's. Japan, Korea, Taiwan, and Hong Kong currently account for almost twice the EC's share of U.S. agricultural exports.

Agricultural Economy



Where Are Exports Headed?

When people debate farm bills, they focus on how changing U.S. policies will affect U.S. farmers. But compared with the rest of the U.S. economy, agriculture is more closely linked to world markets, and exports have a big impact on the health of the sector. Yet foreign demand and supply, which help determine U.S. agricultural exports, are mostly beyond the control of U.S. farm legislation.

Take wheat exports. They fell during the first half of the 1980's, reaching a 14-year low of roughly 900 million bushels in 1985/86. The decline was caused in large part by weak world demand, expanding EC production and export subsidies, a strengthening U.S. dollar, and high U.S. loan rates.

The 1985 farm act made U.S. agriculture more market oriented and expanded government export programs. Lower loan rates substantially lowered the floor on U.S. export prices, and the Export Enhancement Program made it possible for the U.S. to counter EC subsidies in critical markets. And output among competing exporters dropped while global

import demand rose. U.S. wheat exports then surged, gaining 76 percent between 1985/86 and 1987/88.

But this year, wheat exports are down more than one-third from their 1987/88 peak. Good weather worldwide has cut global import demand and increased competitor supplies, sharply curtailing U.S. exports despite much larger supplies.

U.S. export programs are helping to maintain shipments and counter the effects of EC subsidies. But subsidies, which now exceed one-third of the cost of wheat for sales to some markets, do not greatly change the picture of weak world demand.

So while sound U.S. agricultural and trade policies are necessary for increasing exports and a healthy farm sector, they are not sufficient. The fortunes of U.S. farmers during the 1990's will depend heavily on foreign policies affecting export supply and import demand, on foreign production, on global macroeconomic conditions, and on the value of the dollar.

Macro Factors Are Critical

U.S. agricultural exports tend to do best when foreign economic growth is strong and the dollar is weak. Conversely, when the world is experiencing an economic slump and debt burdens are heavy, trade tends to slip.

The 1970's illustrated the importance of macroeconomic conditions in boosting the health of U.S. agriculture. Back then, many developing countries benefited from ballooning credit, which made their economies grow faster than those of the industrialized world. Combined with the falling dollar, this growth surge helped to more than quadruple the value of U.S. agricultural exports.

In contrast, the 1980's showed that exports can easily be stifled by unfavorable conditions. The early 1980's were characterized by a global economic slump, high oil prices, heavy debt burdens in the developing countries, and an appreciating dollar. These factors,

together with uncompetitive domestic farm policies, contributed to a 40-percent drop in the value of U.S. agricultural exports.

Like the 1980's, the 1990's started off with higher oil prices and a global economic slowdown. However, many forecasts predict solid growth by 1992, which should improve the export environment. These forecasts are based on assumptions of modest increases in oil prices, a short war in the Gulf, and less inflation and debt in the developing countries.

What actually happens to U.S. exports will depend in part on the pace of economic recovery. A protracted war, or prolonged higher oil prices, likely would restrain U.S. agricultural exports because of slower economic growth and larger debt abroad.

Some factors could help offset any downward export pressure. For example, if the economic recovery occurs slowly, efforts to reduce U.S. interest rates would further lower the value of the dollar, encouraging exports.

The developing economies are expected to be the largest source of demand growth for U.S. agricultural exports this decade. These countries have rapidly growing populations, and in many cases are experiencing an economic rebound. Debt reduction is key for them because it would boost economic growth and trade.

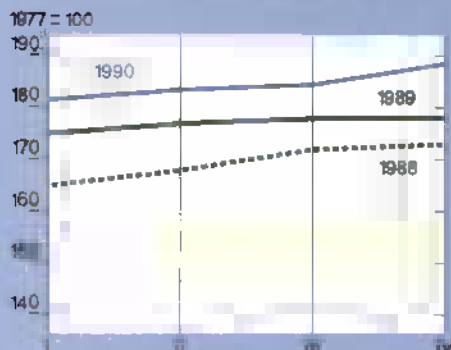
Centrally Planned Economies Are Major Question Marks

Historically, the centrally planned economies have been a major source of agricultural trade growth. For wheat, the USSR and China have accounted for about one-third of U.S. exports since 1987. A large part of U.S. export growth over the last two decades has stemmed from the inefficiency and waste of socialist agricultural systems. However, policies in all of these countries are now in the midst of profound changes.

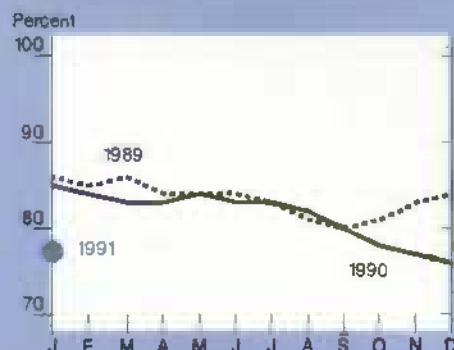
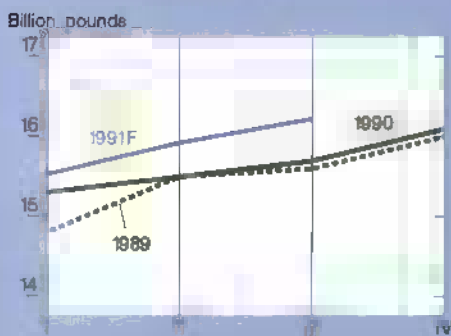
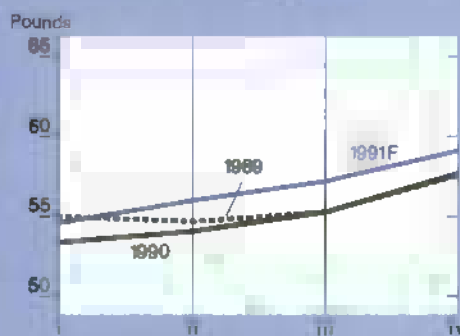
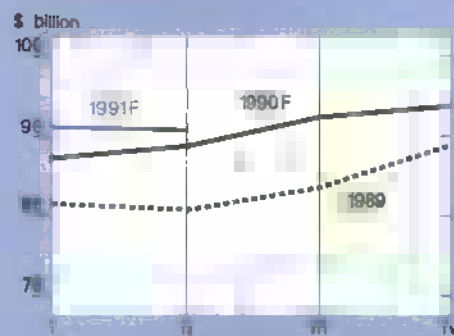
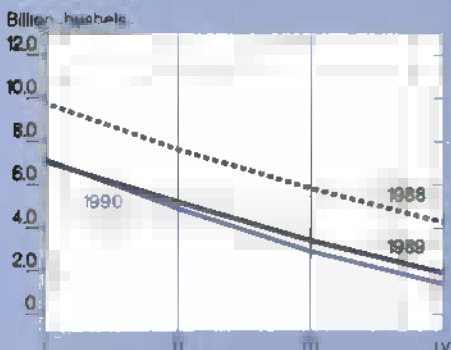
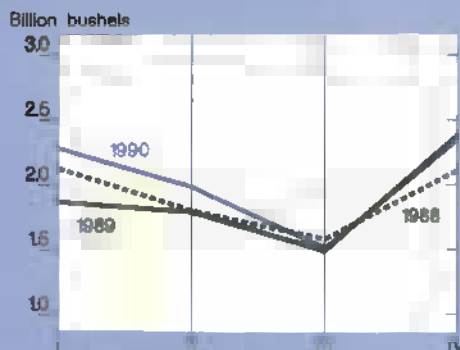
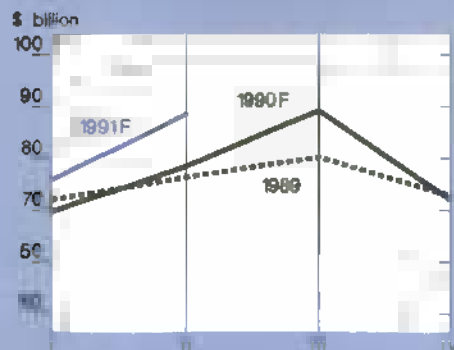
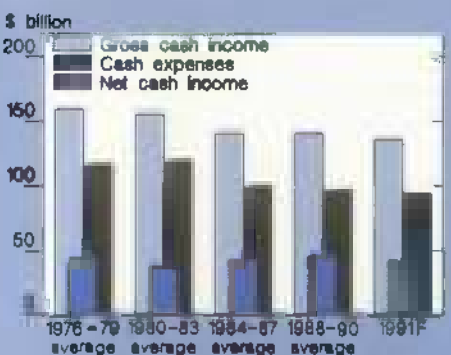
Prime Indicators

Agricultural Economy

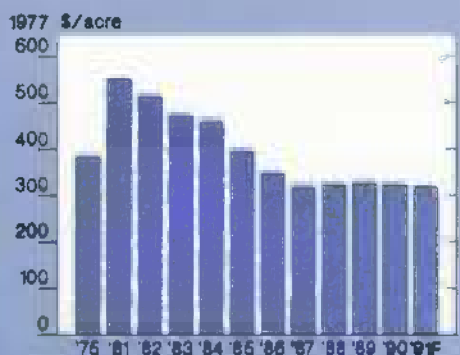
Index of prices paid by farmers

Index of prices received by farmers¹

Ratio of prices received/prices paid

Total red meat & poultry production²Red meat & poultry consumption, per capita^{2,3}Cash receipts from livestock & products⁴Corn beginning stocks⁵Corn disappearance⁵Cash receipts from crops⁴Real cash income⁶

Average real value of farm real estate



Farm value/retail food costs



¹For all farm products. ²Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. ³Retail weight. ⁴Seasonally adjusted annual rate. ⁵I=Dec.-Feb.; II=Mar.-May; III=June-Aug; IV=Sept.-Nov. ⁶Cash expenses plus net cash income equals gross cash income. F=forecast.

Agricultural Economy

Successful market-oriented reforms in the Soviet Union could lead to a substantial decline in its imports, particularly of wheat. Stronger producer incentives would raise output and cut waste. However, the protein deficiency in the livestock sector should mean stronger imports of oilseeds and meals. Yet the prospects for reform are dim in spite of the recently proposed retail price hikes (see the Special Article on the Soviet Union).

But reform is moving ahead in Eastern Europe. Poland has already freed agricultural commodity prices and Hungary is moving in that direction. Food rationing and subsidized consumer prices are on the way out, pushing down consumption.

Economies throughout the region are contracting, putting severe short-run pressures on farmers. One response, already evident in Poland, is a call for high support prices and managed agriculture similar to that of the EC. A move in this direction, away from a free market orientation, could mean larger grain production and export competition for the U.S., particularly for wheat.

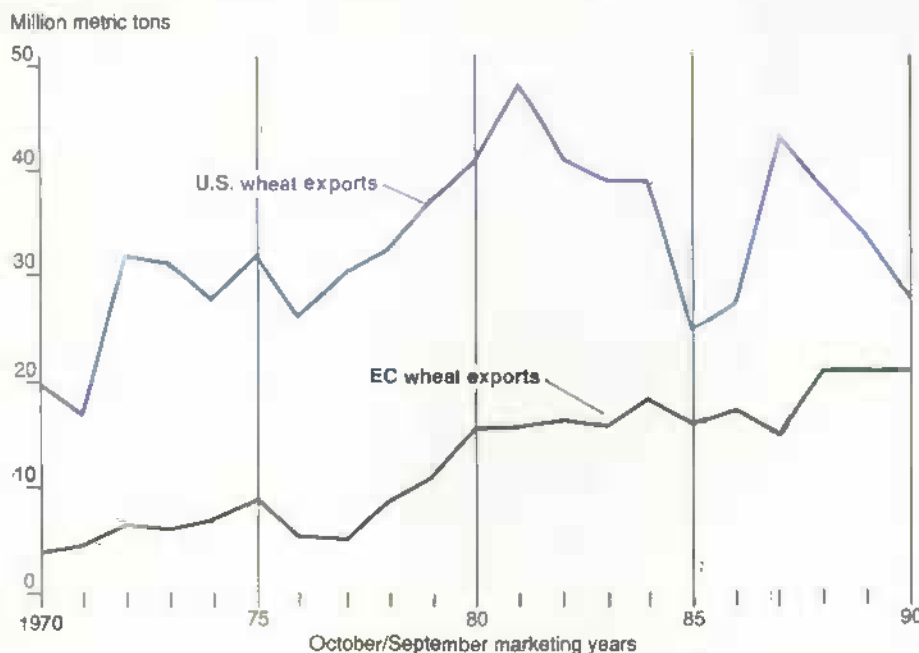
Agricultural reforms have been underway in China for more than a decade, and supply growth has slowed while demand continues to expand. Even though a record 1990 harvest has sharply depressed grain imports, China is expected to need substantially larger wheat imports by the end of the 1990's. China's exports of corn, soybeans, and soybean meal should also taper off.

The reform process in China has stalled out and controls still hold down retail prices. The leadership is backsliding, returning to more intervention (see the World Ag & Trade Department).

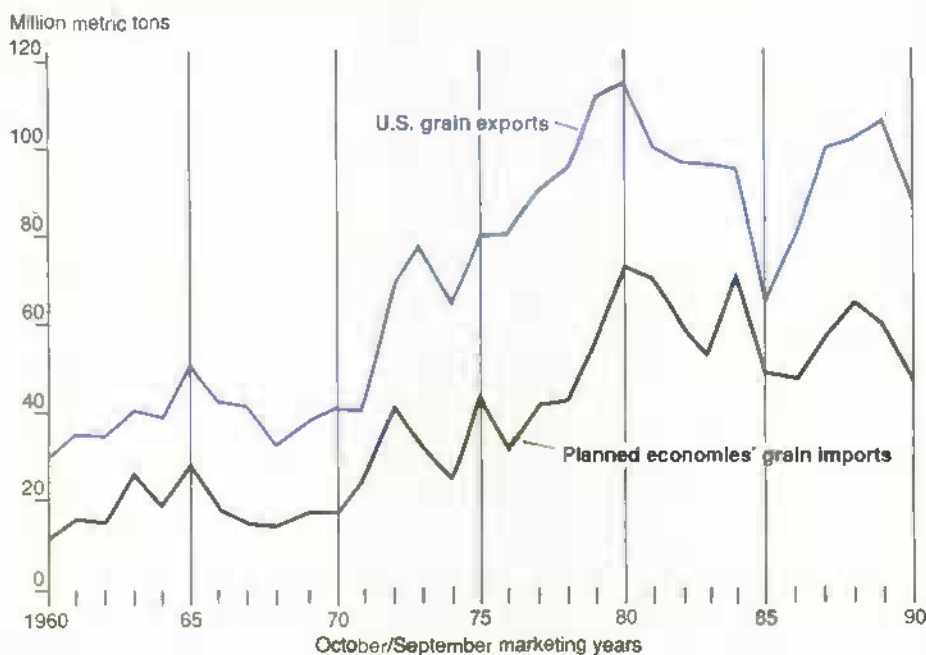
Freer Trade Would Have Sharp Impacts

If a major free trade agreement is reached in the 1990's, the world trading system would change dramatically. The U.S., which accounts for about 25 percent of the world's agricultural trade volume, would realize some of the largest benefits. However, such an agreement

EC Wheat Exports Displaced U.S. Exports in the 1980's



U.S. Grain Trade Is Tied to Planned Economies' Imports



depends primarily on the willingness of U.S. trading partners to negotiate.

Japan's recent liberalization of beef imports shows how freer trade can change U.S. exports. Because of greater meat imports, Japan's corn imports from the U.S. have leveled off. Yet U.S. beef

exports to Japan increased 15 percent in just a year. About 70 percent of U.S. beef and veal exports now head for Japan (see the Special Article on East Asia).

With a global free trade agreement, the composition and volume of U.S. exports would change even more sharply. For

EC Ag Spending To Surge

The EC is expected to spend a record 33 billion ECU (\$46.2 billion) for agricultural support in 1991, up 31 percent from last year. This does not include outlays for structural improvements, which amounted to 2.1 billion ECU (\$2.9 billion) in 1990, or expenditures by individual member states, estimated to be in excess of 10 billion ECU (\$14 billion).

Market support costs for this year probably will breach the budget guidelines set at the 1988 EC Summit. The guidelines limit the annual growth rate in support spending to 74 percent of the growth rate in the Community's GNP.

Reasons why outlays are jumping this year include:

- The inability of EC policies to adequately control surpluses.
- Weakening world commodity prices, reflecting more normal

weather and crop production, which have increased EC outlays for export refunds (i.e., subsidies) and processing subsidies.

- The weakening dollar relative to the ECU that has led to lower world prices expressed in ECU and so higher export refunds.
- Sluggish world markets and a lack of export opportunities, which have resulted in large stocks.
- The high cost of integrating what used to be East Germany into the Common Agricultural Policy (CAP).

Spending on agricultural guarantees will account for over 57 percent of the total EC budget of 57.5 billion ECU in 1991. This will be similar to its share in recent years after accounting for the rise in total EC expenditures from German unification and aid to Eastern Europe. The total EC budget also is likely to set a record and represent about 1.1 percent of the Community's GNP.

Fats and oils will cost the EC taxpayer over 6 billion ECU, 20 percent more than last year's allocation, and nearly 19 percent of expenditures for total market support. Most of the outlays are for crushing subsidies paid to EC oilseed processors.

For grains, the EC has increased the budget allocation by 20 percent to 5.4 billion ECU, primarily for higher export refunds as a result of falling world prices. Spending on the dairy sector is expected to rise 28 percent in 1991 to 5.6 billion ECU to pay for higher storage costs and export refunds.

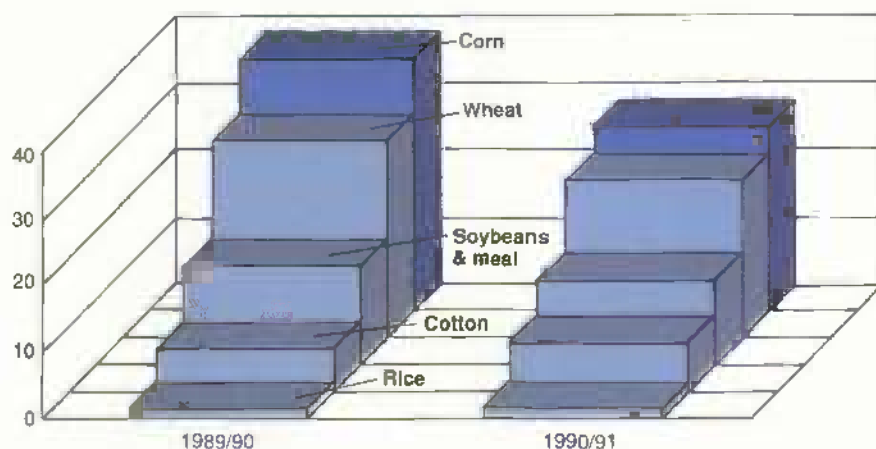
The EC's agricultural budget situation poses a challenge to the CAP and has forced serious debate within the Community over possible reforms. Radical proposals made by the EC Commission in late January are expected to influence the 1991 price package (the EC's farm bill) which probably will be up for debate before the end of this month. [Walter H. Gardiner (202) 219-0610]

example, opening the EC to market forces would mean less wheat and feed grain production there; U.S. output and exports of these commodities would rise. Since the mid-1970's, the EC's policies have sharply boosted their wheat and feed grain production—EC exports took off at the expense of U.S. sales.

On the other hand, U.S. soybean and meal exports would get a much smaller boost. The artificially high grain prices in the EC now encourage meal consumption. These incentives would disappear as EC prices moved down toward world market levels. [Joy Harwood (202) 219-0840 and Frederic Surls (202) 219-0313] **AO**

U.S. Commodity Exports Are Down from a Year Earlier

Million metric tons



Agricultural Economy

Livestock, Dairy & Poultry Overview

For the first time since 1988, supplies of beef and pork, in addition to chicken and turkey, are expected to increase. In 1991, output is forecast up 2 percent each for beef and pork and 5 percent each for chicken and turkey. Milk and egg output are each forecast to increase about 1 percent.

Increased supplies, together with lower projected feed costs and recession-curbed demand, will dampen livestock and meat prices—especially in the first half of 1991.

Effects of hostilities in the Middle East are not expected to disrupt animal product markets. Meat and dairy products destined for the armed forces overseas probably will be purchased through normal commercial channels. Unpredictable general economic effects, particularly energy prices, likely will be more critical.

Hog Farmers Are Delaying Expansion

Despite favorable returns since the beginning of 1990, hog producers have been reluctant to expand breeding herds. The number of hogs kept for breeding on September 1 and December 1 remained about the same as a year earlier. Historically, producers have begun adding to the breeding herd after 6-9 months of favorable returns.

As of December 1, 1990, the inventory of U.S. hogs and pigs was estimated at 54.6 million head, 1 percent above a year ago. The market hog inventory was up 2 percent. With December-May farrowing intentions 1 percent lower, commercial pork production in 1991 is projected to total 15.6 billion pounds, up 2 percent from a year ago. The forecast is down

slightly from earlier projections due to the lower-than-anticipated March-May farrowing intentions.

Barrows and gilts at the seven major markets are expected to average \$50-\$56 per cwt in 1991, compared with \$54 in 1990. Continuing increases in poultry output and little, if any, growth in real per capita income will hold down gains in pork and hog prices. However, continued record-high retail beef prices will partially offset these pressures.

Retail pork prices in 1991 are expected to average about the same as last year's \$2.13 per pound.

Lighter Weight Cattle Marketings?

Cattle slaughter expanded in January, pressuring down cattle prices and wholesale box beef values. Steer prices declined about \$3 per cwt and boxed beef about \$7 per cwt from the December highs of \$81.67 and \$130.57. Slaughter supplies are probably remaining large this quarter compared with December.

In December 1990, retail Choice beef prices hit a yearly high of \$2.95 per pound, up 3.7 cents from the previous month and 26.7 cents above a year earlier. The farm-retail price spread widened to \$1.20 per pound, about 4 cents above the previous month and 16 cents above December 1989.

Retailers and packers are usually not able to widen market spreads when cattle prices are rising. More often, market price spreads narrow when cattle prices are advancing. Retail Choice beef prices tend to be sticky and likely are declining more slowly than farm prices, meaning that the spreads probably widened further in January and February.

The 13-state *Cattle On Feed* report showed 10.9 million head on feed on January 1, 10 percent above a year ago and the highest since 1979. Marketing intentions for the winter quarter were given at 5.7 million head, 3 percent above last year. The number of over-700 pound cattle was 8 percent above a year ago.

However, the inventory of 500- to 699-pound steers on feed expanded nearly 22 percent from a year earlier. These animals are expected to become ready for market at somewhat lighter weights, tempering the trend toward heavier dressed steer and heifer weights.

The U.S. cattle inventory was estimated at 99.4 million head on January 1, up 1 percent from the revised year-earlier inventory. So, the beef cattle herd continues to expand moderately. The downward revisions in inventory mean that herd liquidation in the 1980's was greater than previously reported.

Future Soviet Broiler Buys Are in Doubt

Broiler output is expected to increase about 5 percent in 1991, with first-quarter production growing 5-6 percent, versus 9 percent a year earlier. The slower growth reflects a more cautious approach by producers who face increasing uncertainties about the general economy. Second-quarter production likely will rise 6-7 percent.

Consumption continues to grow, reflecting changing consumer tastes, attractive products, and lower prices. Per capita consumption last year was about 70 pounds, up 3 pounds from a year earlier. Consumption this year is expected to reach 74 pounds.

Wholesale prices showed some strength early in the year. They may have been bolstered by lower placements in November and by strong export demand, especially from the Soviet Union.

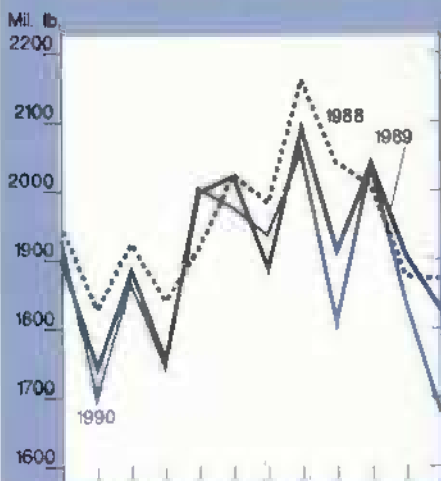
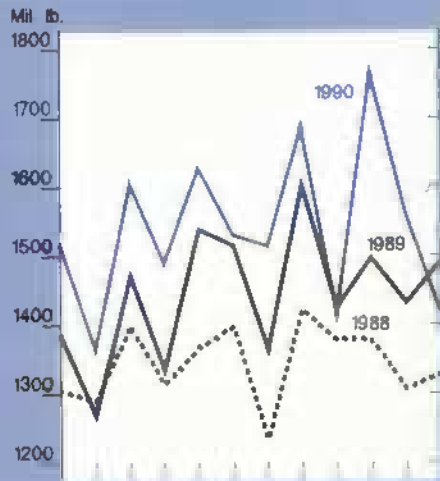
In January, USDA extended a \$25-million export credit guarantee for broilers to the Soviet Union. But questions about the USSR's ability to pay and about U.S. willingness to give more guarantees have clouded the outlook for more Soviet purchases.

Lack of adequate financing may reduce sales to the USSR from the 1990 high of about 300 million pounds. The lost sales may pull down total U.S. broiler exports for the year.

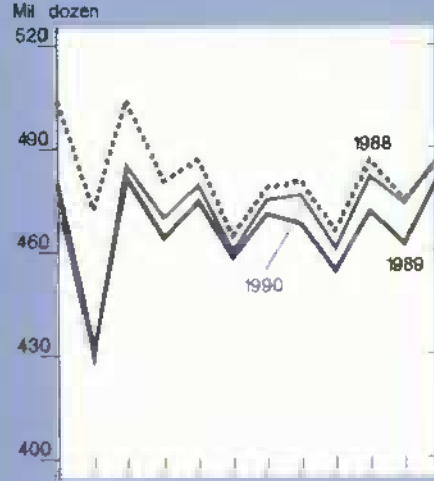
Livestock and Product Output

Agricultural Economy

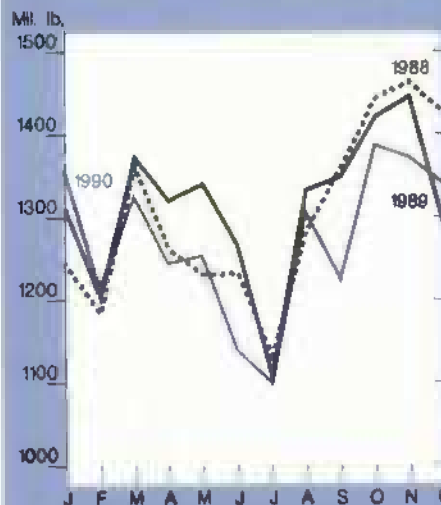
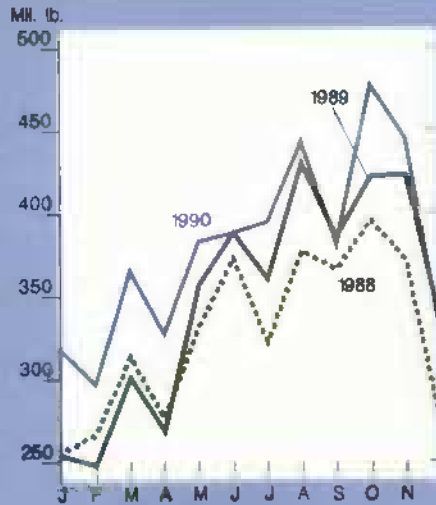
Commercial beef

Broilers¹

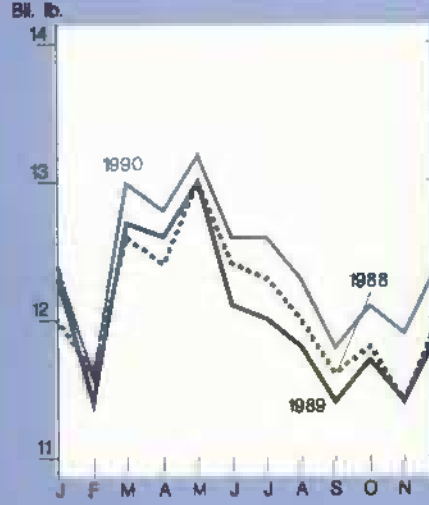
Eggs



Commercial pork

Turkeys¹

Milk



¹Federally inspected production, ready-to-cook.

Wholesale prices are expected to average almost a cent per pound lower for all of 1991, reflecting increased supplies of broilers and other meats. First-quarter prices likely are averaging in the low 50's, compared with 56 cents a year earlier. Second-quarter prices are expected to strengthen to the mid-50's, near year-earlier levels. Whole-broiler retail prices likely are averaging in the high 80's this quarter, a few cents below a year ago.

Turkey Stocks Ballooned

A 9-percent increase in output last year and a 31-percent increase in stocks caused turkey prices to drop sharply by

the end of the year. Turkey stocks stood at 310 million pounds on January 1, 1991.

Wholesale prices for Eastern region hen turkeys are averaging 52-56 cents per pound this quarter, compared with 56 cents a year earlier. However, the low prices are expected to encourage further increases in consumption, particularly in light of relatively high red meat prices. Second-quarter prices are expected to rise to 55-61 cents, but remain slightly below the 1990 average.

Poult placements during August-November last year indicate that first-quarter turkey output probably is rising 4-5 percent from a year earlier. Second-quarter output is expected to grow at the same rate.

Growers have lost money since December and their average net return in 1990 was only marginally above breakeven.

Expectations of tight profit margins likely will restrain producer expansion to about 5 percent this year. A USDA survey of grower intentions also suggests that production will increase 5 percent this year, lifting per capita consumption about 1 pound to slightly over 19 pounds.

Egg Output To Rise, Prices To Slip

Table-egg production in 1991 is expected to increase about half a percent from a year earlier. The table-egg flock

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on January 1, at 230 million hens, was about the same as a month and a year earlier. First-quarter output is expected to rise 1-2 percent from a year earlier. Smaller increases are likely in the second and third quarters as producers adjust to expected lower egg prices.

The wholesale New York egg price in 1990 averaged a record 82.2 cents per dozen, surpassing 1989's 81.9 cents, and continued to rebound from 1988's unprofitable 62 cents. Egg prices remained strong throughout 1990, but monthly prices showed gradual year-to-year declines.

Egg prices are likely to continue to be relatively strong through 1991, but below 1990's records. Prices will be pressured by output gains. First-quarter wholesale prices probably are averaging in the mid-80's, compared with about 88 cents last quarter and a year ago. First-quarter retail prices are probably averaging around 98 cents per dozen, well below the \$1.12 of a year ago.

Second-quarter prices are likely to average in the low 70's at wholesale and in the high 80's at retail, reflecting weaker post-Easter demand. Per capita consumption is forecast down 1-2 eggs in 1991 from 234 last year.

Domestically produced eggs going to breakers increased 12 percent in 1990 to over 1 billion dozen. The gain reflected the growing popularity of egg products, purchases by the Department of Defense for the Desert Shield operation, and diversions of eggs from flocks placed under restrictions because of Salmonella enteritidis.

Egg products represented almost 22 percent of 1990 total-egg consumption. More processed eggs will be eaten again in 1991. The share of breaker eggs used in liquid and dried forms was 35 and 34 percent—liquid use surpassed dried for the first time.

Dairy Replacement Herd Is Smaller

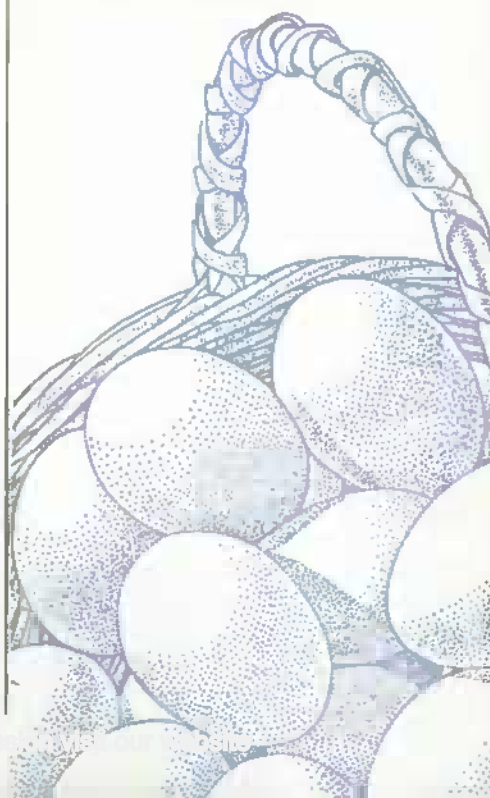
On January 1, dairy farmers held about 4.2 million replacement heifers over 500

pounds, down 1 percent from a year earlier. The decline reflects the aftereffects of the drought-reduced 1988 forage crops. Even so, dairy farmers will have enough heifers this year to expand the dairy herd if they want to.

Compared with a year earlier, the January 1 drop in heifer numbers was less pronounced than the July 1 drop. During the 1988/89 forage year, farmers apparently kept relatively few heifers in order to conserve forage supplies for the milking herd. By the second half of 1991, the final effects of the 1988 drought will have dissipated except in the West. That's because the heifer supply for late 1991 was weaned after 1989 forage was available.

A January 1 inventory of about 41 replacements per 100 milk cows has largely neutral implications for milk cow numbers. This ratio was sufficient to fuel expanding cow numbers in the early 1980's. However, cow numbers declined later in the 1980's with this same ratio.

For further information, contact: Ken Nelson, coordinator; John Ginzler, cattle; Leland Southard, hogs; Lee Christensen, Agnes Perez, and Larry Witucki, poultry; Jim Miller and Sara Short, dairy. All are at (202) 219-1285. **AO**



Field Crops Overview

The trade outlook for 1990/91 is marked by fierce competition among principal exporters. U.S. exports of corn, wheat, and soybeans are lagging behind last year's pace. And major markets continue to be disrupted by the Gulf war, shifts in EC and U.S. government export credits and food aid, and problems in the Soviet Union and Eastern Europe.

Global grain trade and prices are forecast below a year ago because production is expected to increase at twice the rate of consumption. Wheat production is up sharply, followed by smaller gains in coarse grains and rice.

If wheat prices remain low and world ending stocks increase by more than 20 percent, major exporters will be induced to cut output in 1991/92.

World Wheat Crop Sets a Record

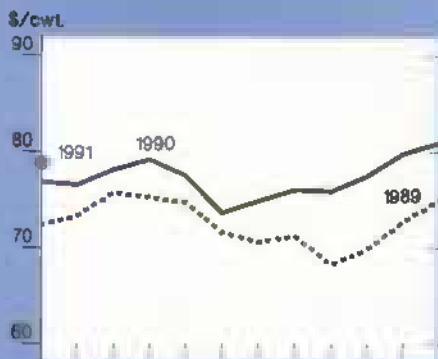
Among the major grains, wheat has the lowest export price relative to a year ago—down about \$46 per ton as world production has swamped demand. Consumption growth is forecast to absorb only 28 million of the 52-million-ton jump in output. Driving the record output of 589 million tons were both expanded area and record world yields. Output gains were distributed about evenly as major exporters and importers each recorded around a 9-percent increase.

Overall demand by major importers has not changed from 1989/90. Importers are asking for and getting large wheat subsidies. The USSR, for example, has received credits, loans, and food aid from a number of major exporters. Yet the EC delayed some Soviet aid because of the government's actions in the Baltic Republics. For example, the EC held up a \$750-million food and medical aid package because of the Baltic actions from January to mid-February.

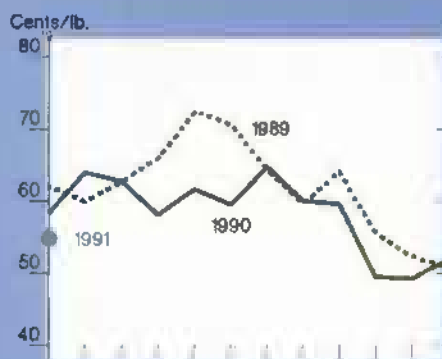
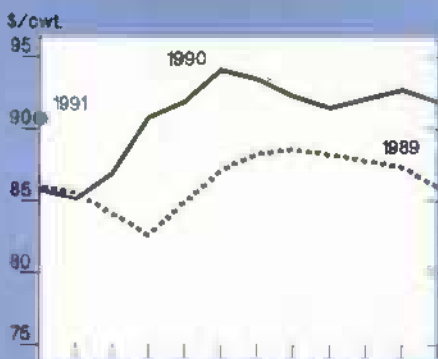
Commodity Market Prices

Agricultural Economy

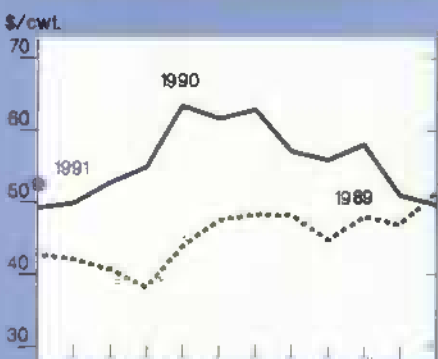
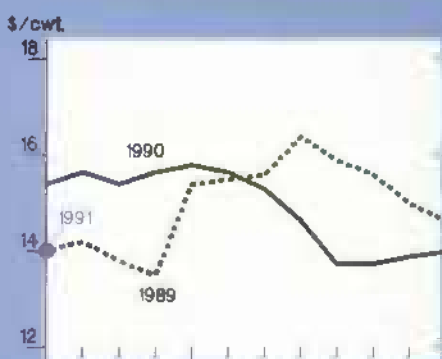
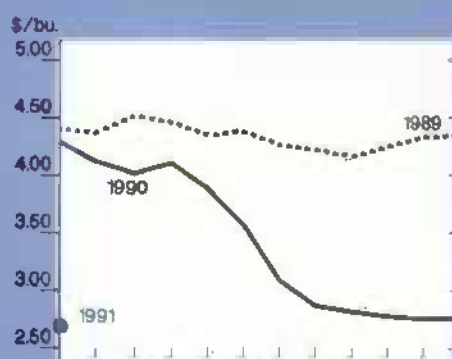
Choice steers, Omaha



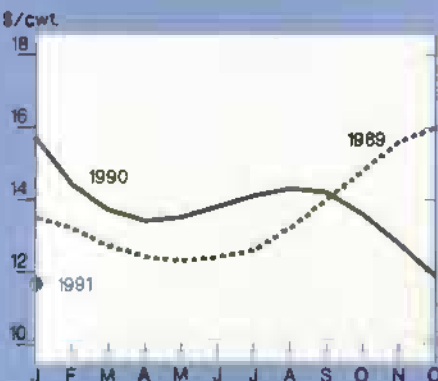
Broilers, 12-city average

Corn, Central Illinois¹Feeder cattle, Kansas City^{2,3}Eggs, New York⁴Soybeans, Central Illinois⁵

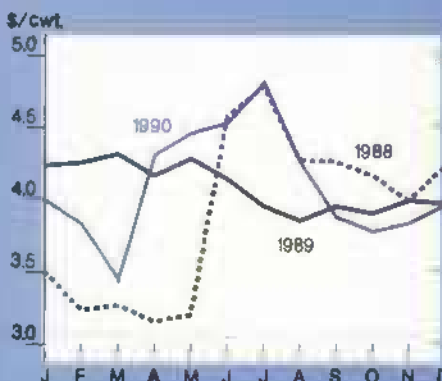
Barrows and gilts, 7 markets, Omaha

Milled rice, SW Louisiana⁶Wheat, Kansas City⁷

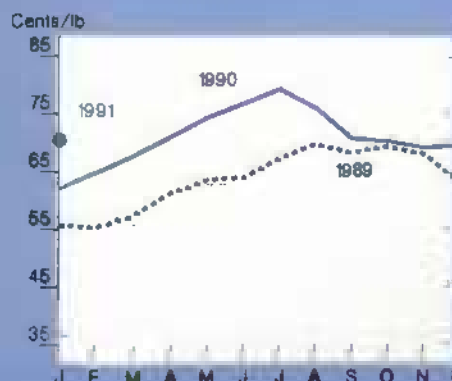
All milk



Sorghum, Kansas City



Cotton, average spot market



¹No. 2 yellow ²600-700 lbs. medium no. 2 ³October data not available ⁴Grade A large ⁵No. 1 yellow ⁶U.S. No. 2, long-grain ⁷No. 1 HRW

Agricultural Economy

From the U.S., the Soviets received \$1 billion in GSM-102 credit guarantees to purchase U.S. farm products, making the USSR the second largest GSM beneficiary after Mexico. Through February 15, the Soviets had used \$838 million. All of the Soviet purchases of U.S. wheat received bonuses under the Export Enhancement Program.

Citing current economic and political turmoil in the Soviet Union, USDA announced on February 15 that it is unlikely that the USSR will receive credits beyond the \$1 billion this fiscal year.

From June 1990 to January 1991, total U.S. wheat sales under the Export Enhancement Program were almost 17 percent ahead of a year earlier, with average bonuses nearly triple 1989/90 levels, at \$36 per ton. Nonetheless, overall U.S. wheat shipments and sales to date are running 18 percent behind a year ago. In contrast, EC wheat exports—aided by restitution rates that are more than double the market price—are forecast to match last year's record.

Coarse Grain Crop Nears Use

The outlook for 1991/92 calls for small increases in U.S. and foreign coarse grain output. In 1990/91, world coarse grain output, forecast at 826 million tons, is expected to fall slightly below use. Corn and barley account for virtually all of the 22-million-ton rise. Because sorghum use is forecast to exceed output, sorghum prices are up. Corn prices remain about the same as a year ago because world wheat prices are low. So livestock producers have been using wheat as a substitute for coarse grains in feed rations.

Global corn output is forecast to rise 2 percent to 471 million tons, with most of the gain in the U.S. and China. Drought will remove South Africa from the corn export market and possibly make the country a net importer for the first time since 1984/85.

However, world corn trade is projected to fall 14 million tons, with U.S. exports to drop more than 20 percent. Corn

Decline in Global Corn Stocks Is Slowing

	1988/89	1989/90	1990/91
<i>Million metric tons</i>			
WORLD			
Wheat			
Production	500	537	589
Use	532	535	563
Exports	97	96	94
Ending stocks	117	119	145
Corn			
Production	401	463	471
Use	459	479	473
Exports	64	73	59
Ending stocks	88	72	69
Soybeans			
Production	96	107	105
Use	98	104	105
Exports	24	27	26
Ending stocks	18	20	20
UNITED STATES			
Wheat			
Production	49	55	75
Use	27	27	36
Exports	38	34	28
Ending stocks	19	15	27
Corn			
Production	125	191	202
Use	133	146	157
Exports	51	60	47
Ending stocks	49	34	32
Soybeans			
Production	42	52	52
Use	31	34	35
Exports	14	17	15
Ending stocks	5	7	9

Note: Exports of wheat and corn do not include intra-EC trade shipments. Data are for marketing years. The wheat year is July/June, and the soybean and corn years are October/September.

exports from China and wheat for live-stock feed from the EC, Canada, and Australia are expected to displace some U.S. shipments.

U.S. corn exports and outstanding shipments are currently 27 percent behind a year ago. Sales are up to Eastern Europe, but are lagging to the USSR, Mexico, South Korea, and Japan.

The pace of U.S. corn sales to the USSR picked up in January when the U.S. allocated \$530 million in credit guarantees to the Soviets for feed grain purchases. Mexican import needs are down because of a 2-million-ton rise in domestic output.

South Korean corn imports are expected to fall for the first time in 5 years because feed-quality wheat is reportedly

\$30 per ton less than corn. The pace of Japanese corn imports from all suppliers may pick up as livestock producers shift away from higher priced sorghum.

Global Rice Crop Expanding

Record rice crops in India and China are responsible for 4 million of the expected 6-million-ton (milled basis) gain in 1990/91 foreign output. This will more than offset a minuscule reduction in U.S. output and push global production to 350 million tons. Because global use will grow slower than output, stocks are expected to rise 6 percent. World output is expected to rise again in 1991/92, assuming trend growth in yields and little change in area.

World trade for calendar 1991 is forecast up only slightly to 12.5 million tons. Burma, Pakistan, and Thailand are expected to account for most of the increase. China, on the other hand, will consume or store virtually all of its larger output.

Calendar 1991 U.S. exports are forecast to be 2.4 million tons, unchanged from a year ago. Larger purchases by Brazil are helping offset the loss of the Iraqi market. Iraq had been the top foreign customer for U.S. rice in 5 of the last 6 years, taking 220,000-500,000 tons annually.

U.S. Soybean Crop To Expand

In 1991/92, U.S. production of soybeans and minor oilseeds is likely to rise because of the planting flexibility provided for under the 1990 farm act (see the Commodity Spotlights).

In 1990/91, world soybean production is forecast to fall almost 2 percent short of 1989/90's output of 107 million tons. Output in Brazil and Argentina is projected to drop 3 million tons. Lack of government credits and weaker prices cut the incentives of Argentine and Brazilian farmers. Also, in Argentina, expectations that their currency would remain overvalued deterred producers from expanding output.

Brazilian soybean and meal exports are forecast to decline, although Argentina's are expected to increase. Both countries are likely to reduce meal exports in favor of raw soybeans because of expectations of reduced Soviet meal purchases.

U.S. soybean and meal exports are forecast to fall 7 percent from a year ago. U.S. meal sales reflect a package of \$130 million in credits to the USSR for meal extended in January. A \$58-million allocation of GSM-102 credits for soybean purchases announced in mid-February is now being tapped by the Soviets.

U.S. soybean oil exports are forecast to fall to 499,000 tons, the lowest since 1975. To date, U.S. soybean oil exports are running 80 percent behind a year ago,

in large part because of the elimination of food aid (PL-480) to Pakistan, traditionally the largest recipient of food aid for vegetable oils.

Pakistan's PL-480 eligibility was revoked because of questions about its nuclear capability. Although GSM-102 credits were made available, they were cut from \$105 million to \$40 million. Without these credits, South American soy oil and Malaysian palm oil could capture larger shares of the export market.

A forecast 8-percent increase in world cotton production in 1990/91 to 86 million bales will barely keep pace with projected use. World output is forecast up 6 million bales; however, the California drought is increasing the uncertainty of 1991 U.S. output. World ending stocks are projected to drop to 22.7 million bales, the lowest since 1983.

Although global cotton trade is forecast down, U.S. exports are expected to be slightly higher than last year. Cotton is the only major U.S. crop whose exports are ahead of 1989/90's pace. Currently high prices are expected to encourage larger U.S. and foreign output in 1991/92. [Tom Bickerton (202) 219-0826]

For further information, contact Sara Schwartz, world food grains; Edward Allen, domestic wheat; Janet Livezey, domestic rice; Pete Riley, world feed grains; Larry Van Meir and Jim Cole, domestic feed grains, Tom Bickerton, world oilseeds; Roger Hoskin, domestic oilseeds; Carolyn Whitton, world cotton; Scott Sanford, domestic cotton, Jim Schaub, domestic peanuts. World information (212) 219-0820; domestic (202) 219-0840. **AO**

Specialty Crops Overview

Record-breaking cold weather during the last week of 1990 destroyed over half of California's orange crop. Lemons, avocados, and early strawberries also sustained varying degrees of damage. However, the California drought is not expected to seriously depress the state's output of most fruits and vegetables.

Grower prices for the 1990 potato crop are expected to average below a year ago due to greater production and larger stocks. Dry edible bean prices are down substantially due to a 37-percent increase in production last year.

U.S. sugar production from cane and beets in 1990/91 is forecast up 3 percent from a year ago. And with U.S. sugar imports higher, domestic raw sugar prices are dropping despite an anticipated rise in use of more than 2 percent. World sugar prices have been trending down as well and the price has slipped below 9 cents a pound.

Orange Crop Cut by Freeze

Record-breaking low temperatures throughout the western U.S. during the final week of 1990 destroyed an estimated 57 percent of California's orange crop. In addition, lemons, avocados, and early strawberries sustained varying degrees of damage. However, Arizona's citrus and California's winter vegetables escaped relatively unscathed.

Forecasts of California's navel and valencia orange production dropped 60 percent and 52 percent following the freeze. Losses were greatest in the San Joaquin Valley, where most of the navel and about half of the valencia oranges are grown. Navel oranges are the principal fresh market variety harvested in California during the fall and winter, while

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valencias account for most of the fresh market crop between April and September.

Total fresh orange supplies will be lower and retail prices higher for the remainder of the season. California normally produces about 75 percent of the fresh oranges consumed in the U.S. Some of the lost output will be replaced by Florida oranges diverted from processing, and some by greater imports.

Although California is a minor supplier of orange juice, futures prices for frozen concentrate rose to \$1.20 per pound of solids during January from a low of \$1.03 in mid-December. The increase was due to smaller-than-expected production in Florida and uncertainty about the size of the Brazilian crop.

Forecasts of California's lemon production fell 18 percent following the freeze. Almost all U.S. lemons are produced in southern California and Arizona where losses due to cold weather were less severe than in the San Joaquin Valley. However, lemon exports will be down from a year ago because quality was harmed.

California's avocado crop is estimated to have been reduced 10-20 percent by the freeze, although industry analysts still expect the current crop to be larger than a year ago. While the early strawberry harvest was lost, the plants survived and production returned as new fruit developed.

Damage was minimal and price hikes were short lived for iceberg lettuce, broccoli, cauliflower, and celery produced in the Imperial Valley, other southern California areas, and Arizona. However, central California growers lost some broccoli, cauliflower, carrots, and winter potatoes which may cause some minor supply gaps this spring.

Lettuce prices before the freeze were \$3-\$4 per 24-head carton, f.o.b. shipping points, which is considered the minimum price to cover harvesting and marketing costs. Although prices rose immediately following the freeze, they quickly returned to the \$3-\$4 range. Nonetheless, lettuce prices are expected higher

during the entire winter season because of a 7-percent decline in acreage.

Supplies of warm-season vegetables (tomatoes, peppers, cucumbers, squash, eggplant, and snap beans) were unaffected. U.S. consumers receive nearly all warm-season vegetables from Florida and Mexico, and both escaped the cold.

Winter Vegetable Acreage Declined

In 1991, harvested acreage for seven selected fresh winter vegetables is estimated to have dropped 4 percent from a year earlier. The decline in broccoli (16 percent), cauliflower (14 percent), and carrots (7 percent) partly resulted from field abandonment in central California. Celery acreage fell 1 percent and lettuce area was down because of low prices during the past season.

In contrast, Florida winter tomato acreage recovered from last year's freeze-reduced level to near what was grown in 1989. Sweet corn acreage rose 9 percent.

Low water stocks and below-normal winter precipitation virtually ensure that the California drought will continue this year. Lakes and reservoirs were about half their seasonal levels in late January. Normally, reservoirs gain water during January, but this year levels dropped.

State water officials completely cut out agricultural deliveries from state water projects. However, most fruit and vegetable crops likely will get the water they need from other sources (see the Resources Department).

Fresh Potato Supplies Up

Greater production than a year earlier has meant lower prices for the 1990 crop. U.S. potato production rose 6 percent last year to 393.9 million cwt. Production gains were biggest in Idaho, where output rose 10 million cwt from a year earlier. Although 40,000 more acres were planted there, yields fell nearly 4 cwt per acre, leaving a relatively modest increase in output. In Washington, output rose

almost 4 million cwt, but yields were down 30 cwt per acre.

Fresh stocks of fall potatoes on January 1, 1991, were up 7 percent from a year earlier. Stocks in Idaho were up 14 percent while those in Washington were down 3 percent. North Dakota stocks rose 16 percent, but remained below their long-term trend. Processors' stocks of frozen french fries on January 1 were up 4 percent from a year earlier, while stocks of all frozen potatoes were up 6 percent.

The first estimate of the season average potato price is \$6.15 per cwt, down 16 percent from the year-earlier record. Monthly average grower prices were \$5.54 and \$5.72 in December and January, compared with \$7.02 and \$7.15 a year earlier. Average grower prices typically fall 3-4 percent for each 1-percent increase in production.

Grower receipts for 1990 potatoes will fall short of 1989 receipts, which were the highest since 1984. The value of 1990 production is estimated to be \$2.4 billion, down 11 percent from 1989. The expected drop in grower prices more than offsets the increase in output.

Dry Bean Crop Larger, Prices Drop

Dry edible bean prices dropped substantially when 1990 production jumped 37 percent from a year earlier to 32.4 million cwt. The average U.S. grower price in December was \$18.80 per cwt, down from \$27.80 a year earlier.

Navy bean production rose the most, up 48 percent, due to record yields in Michigan and increased acreage and higher yields in Minnesota and North Dakota. Substantial increases also were recorded for great northern beans (33 percent), pinto beans (43 percent), and kidney beans (37 percent). Production of all types was up 68 percent from 2 years ago.

F.o.b. dealer prices for navy beans in Michigan in early January were \$19-\$20 per cwt, down from \$28.50-\$29.00 a year earlier. Pinto beans also were

Agricultural Economy

selling at \$19-\$20 per cwt, compared with \$38.50-\$39 a year earlier.

Prices likely will remain low until first indications about farmers' planting intentions for 1991 are announced later this month. U.S. exports of navy and pinto beans were strong last season, and the lower prices probably will give them an additional boost in 1991.

Sugar Crop Expected Larger

U.S. sugar production in 1990/91 (September-August) is forecast up nearly 3 percent from a year earlier to 6.8 million short tons, raw value.

Florida's cane sugar crop is estimated to be a record 1.7 million tons, up 19 percent from a freeze-stunted 1989/90, reflecting increased acreage and higher yields. Production is expected to drop in Hawaii, continuing a long-term trend. Louisiana output is likely down as well due to freeze damage in December 1989.

Beet sugar production is forecast to be 3.8 million short tons, 11 percent above the previous crop. Sugarbeet acreage is 6 percent higher, and yields are higher in the field and the factory. The beet refinery industry has been installing new processing technology that reduces the amount of sugar lost in molasses.

U.S. sugar use is forecast to increase more than 2 percent in 1990/91, to 8.7 million tons, raw value. The growth comes from greater use in confectionery, bakery, and cereal industries.

An estimated 2.3 million short tons of sugar, more than a quarter of U.S. consumption, will be imported in 1990/91. The 1990 farm act requires that, beginning October 1, 1991, at least 1.25 million short tons of raw sugar must be imported by the U.S. each fiscal year.

The improved crop outlook and increased imports have put downward pressure on domestic raw sugar prices. U.S. prices (Contract No. 14 nearby futures, c.i.f./duty paid, New York) averaged 22.97 cents a pound from October through December 1990. Prices in Janu-

ary 1991 averaged 21.86 cents, and by early February had fallen to about 21.4 cents. [Glenn Zepp (202) 219-0883]

For further information, contact Kate Buckley, fruit; Gary Lucier, vegetables; Peter Buzzanell, sweeteners; Verner Grise, tobacco; Doyle Johnson, tree nuts and greenhouse/nursery; David Harvey, aquaculture; Lewrene Glaser, industrial crops. All are at (202) 219-0883. AO

Upcoming Releases from USDA's Agricultural Statistics Board

The following reports will be issued at 3 p.m. Eastern time.

March

- 1 Egg Products
Poultry Slaughter
- 6 Dairy Products
- 7 Celery
Vegetables
- 11 Crop Production
- 13 Potato Stocks
- 14 Turkey Hatchery
- 15 Milk Production
- 18 Cattle on Feed
- 19 Livestock Slaughter—
Annual
- 20 Calfish
Agricultural Chemical Usage
- 21 Vegetables
- 22 Cold Storage
Livestock Slaughter
Eggs, Chickens, & Turkeys
- 26 Hatchery—Annual
Hop Stocks
- 27 Peanut Stocks & Processing
- 28 Grain Stocks
Hogs and Pigs
Prospective Plantings
Rice Stocks
- 29 Agricultural Prices
Wool & Mohair

Commodity Spotlight



Wheat Area To Drop 11 Percent

U.S. farmers said they plan to plant 13 percent fewer acres with spring wheat than in 1990, according to a special survey of early intentions. And last fall, farmers seeded 10 percent less winter wheat than a year earlier. Reduced planted area points to a smaller crop in 1991.

However, wheat output probably will decline more than area would suggest because farmers are not expected to harvest as much of planted area as last year and yields probably will not match 1990's record.

U.S. farmers will respond to a higher Acreage Reduction Program (ARP) requirement, 1990's record world output, and low wheat prices by reducing production in 1991. However, beginning stocks are forecast up 446 million bushels to nearly 1 billion, leaving the U.S. with large supplies despite the lower expected production.

If the rest of the world also adjusts to low prices by lowering output, U.S. exports are likely to expand in 1991/92 (June/May). However, if foreign output

Commodity Spotlight

persists at near-record levels, U.S. exports would not post a major increase. And wheat supplies probably would remain large despite the drop in U.S. production.

Spring Wheat Area Prospects Are Down

A USDA plantings report published February 11 showed that farmers planned to plant 1 percent more acres with durum and 16 percent fewer acres with other spring wheat. Spring wheat producers are reducing wheat acreage faster than winter wheat producers in part because of the transition to the new programs under the 1990 farm act. However, a large portion of the decline in both winter and spring acreage is simply in response to the higher ARP requirement.

Winter wheat producers who planted before the new farm bill was passed have the option this season only of receiving deficiency payments on 85 percent of their wheat base if they accept deficiency payments using a 12-month average price instead of a 5-month average price. This would cut deficiency payments only an estimated 7 cents per bushel to \$1.40 per bushel.

Spring wheat producers, on the other hand, can only receive deficiency payments on a maximum of 70 percent of their base. The ARP accounts for 15 percent while the remaining 15 percent of their base is called "Normal Flexible Acres." The flexible acres can be planted with any program crop or oilseed without losing base history, but are ineligible for deficiency payments.

Wheat prices continued to decline into January, leaving spring wheat producers with even less of a reason to plant than winter wheat farmers had last fall. The low prices encourage spring wheat farmers to plant some other crop on their flex acres.

In the Northern Plains, a significant portion of wheat producers has grown sunflowers in previous years, and is likely to find them an attractive alternative in 1991. Sunflowerseed prices will be sup-

ported by a new marketing loan program (see the following Commodity Spotlight).

If wheat prices stay low through the spring while oilseed prices strengthen, some spring wheat producers may put their entire wheat base into the 0/92 program and grow minor oilseeds on all their permitted acres. This option allows them to receive 92 percent of the deficiency payments they would have received if they had planted wheat, while planting minor oilseeds on their permitted acres. But then the oilseed output would not be eligible for the marketing loan program.

After several years of drought in the Northern Plains, the value of fallow land in a crop rotation has become clearer to many farmers. The increased ARP will allow more fallow area. And some farmers may fallow flex acres, conserving scarce soil moisture for a time when wheat prices are more attractive.

The new conservation programs also may attract some spring wheat base (see the December *Agricultural Outlook* for more on the 1990 farm act).

Durum Intentions To Affect Plantings?

The late January intentions survey showed that farmers plan to plant more acres with durum. The mid-January average farm price in North Dakota pegged durum 35 cents per bushel above other spring wheat. This premium of more than 15 percent is ample incentive for switching from other spring wheat to durum.

But the premium is volatile. As recently as August 1990 there was no durum premium in North Dakota, and throughout most of 1989/90 durum actually sold at a discount to other spring wheat. Over the last decade durum has commanded a price premium only 55-60 percent of the time.

The durum market is comparatively small and dominated by North Dakota production. Beginning stocks for 1991/92 are forecast to be 76 million bushels, up over 50 percent from the year

before. Any output increase in 1991 could contribute to sharply higher stocks and lower prices. Hearing that their neighbors plan to increase durum area, many farmers who thought they would plant durum may change their minds.

Harvested Area Is Loosely Linked to Planted

In 1990, winter wheat producers harvested 88 percent of their planted area, up from 75 percent the year before and the highest in recent years. In 1991, the percent of planted area that is harvested probably will drop.

In the Southern Plains, winter wheat plantings decreased only modestly. But many of the region's farmers traditionally plant all of their wheat base, and then choose the portion that they feel has the lowest yield prospects to be cut down or grazed out to meet the ARP requirements.

Since the ARP requirement has increased from 5 percent to 15 percent, more of the planted area will have to be put into conserving uses instead of harvested for grain. Also, farmers do not have the option of modifying their contracts to harvest up to 105 percent of their base as they did in 1990. Strong cattle prices and low wheat prices also will encourage more wheat grazing.

Some winter wheat producers, especially if they have had winter damage on more than 15 percent of their wheat base, will be attracted to the normal flexible acres program. They will receive higher deficiency payments on 70 percent of their base while foregoing deficiency payments on their normal flexible acres. But they are allowed to plant a spring crop, such as sorghum, on the normal flexible acres. Early intentions show a whopping 19-percent increase in sorghum area.

On the other hand, if winterkill is light, most winter wheat farmers will find it profitable to harvest a maximum of 85 percent of their base and receive deficiency payments determined with a slightly lower payment rate. In other words, they will not take the normal flexible acres option.

In soft red winter regions, producers normally harvest a higher percent of planted area than elsewhere. However, their planted area dropped almost 20 percent last fall. Program participation is lower in soft red winter states.

Yield Prospects Are Tempered

In 1990, wheat producers posted record average yields. And while another record is always a possibility in 1991, back-to-back record yields are rare. So the size of any potential yield increase is limited by last year's outcome. Through early February, there have been reports of some winterkill in the Pacific Northwest and some soft red winter areas, but growing conditions have been favorable in the Southern Plains.

Normally, an increase in the ARP sets the stage for increased yields because each farmer takes his lowest yielding land out of production. However, in 1991 this is likely to be offset by the regional shifts in planted area.

Yields in soft red winter areas average almost 10 bushels per acre higher than in hard red winter areas. With area planted to soft red winter down almost 20 percent, and hard red winter plantings down only 8 percent, a larger portion of the winter wheat crop will be in lower yielding varieties. [Ed Allen (202) 219-0840] **AO**

Upcoming Economic Reports

Summaries of the following reports from USDA's Economic Research Service will be issued at 3 pm Eastern time on the dates shown.

March

- 13 Sugar and Sweeteners
- 14 Fruit and Tree Nuts
- 19 Agricultural Outlook
- 27 Aquaculture

Farmers Say Oilseed Acres To Rise

In the first survey of the season, U.S. farmers said they plan to plant 1 percent more acres with soybeans and 36 percent more acres with sunflowers than a year earlier. Farmers also said they would plant 18 percent more acres with cotton in 1991. That will, in turn, boost cottonseed production.

Farmers also were asked about their planting intentions for other minor oilseeds such as canola, flaxseed, mustard seed, rapeseed, and safflower seed. One percent of those queried said they plan to plant these crops, and another 1 percent said they were undecided.

The January planting intentions survey was unusual because it was taken so early in the season. And because farmers were asked about their plans when many were still making up their minds, the acreage estimates could change significantly. USDA conducted the survey to get an early reading on how farmers would react to the 1990 farm act.

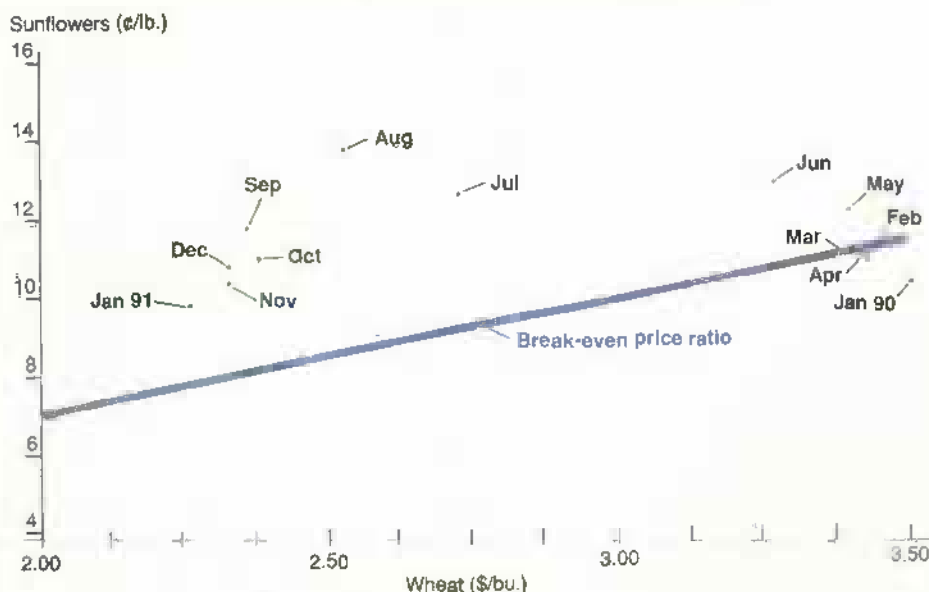
Nearly 19,000 farmers across the nation responded to the survey. Results from a larger and more detailed planting intentions survey will be released on March 28, followed by a report on actual plantings on June 27. The questions about sunflower intentions were asked of farmers in Kansas, Minnesota, North Dakota, South Dakota, and Texas. In 1987, these states accounted for 96 percent of U.S. sunflower acreage.

Increased interest in oilseeds in 1991 is due mainly to the new oilseeds provisions of the 1990 farm act (see box). The new provisions increase farmers' flexibility to respond to changes in market prices and provide protection against price volatility. A bearish price outlook for soybeans, however, likely will limit any expansion, while larger relative shifts are expected for other oilseeds.

Sluggish Exports Cut Soybean Gains

Despite strong domestic demand for soybean products, a larger-than-expected crop in 1990 and a sluggish export market have weakened the outlook for prices. With larger ending stocks projected, it is unlikely that soybeans will be in short supply when the new crop becomes available this fall. So, rela-

Since Last March, Prices Have Signaled Farmers To Plant Sunflowers



Monthly sunflower/wheat price ratios, flexible base, based on North Dakota prices January 1990-January 1991.

Commodity Spotlight

tively low prices would limit any income gains from taking advantage of the new flexibility to plant more soybeans.

Soybeans compete for available acreage most often with corn. With corn for December delivery hovering around \$2.50-\$2.60 per bushel, November soybean futures would need to exceed \$7.00 for farmers to shift large amounts of land into soybeans. Although soybean futures prices rose in mid-February on speculation about poor yields in South America, prices for November delivery remained below \$6.50.

The indicated 1-percent gain in acreage may reflect rotational considerations or be in areas where soybeans can be substituted for other, less profitable program crops such as wheat. Estimates among industry analysts call for an increase of less than 1 million acres, while the initial planting intentions report suggested an increase of 705,000 acres.

It is still early in the season and a number of uncertainties remain. So far, exports of soybeans and products are lagging well behind a year earlier, depressing prices and expectations. Yet prospects for expanding U.S. acreage could jump if Soviet or European purchases were to take off.

This spring's soybean price outlook also will be shaped by South American production. Brazil and Argentina are forecast to harvest smaller crops this spring than a year ago. While the reduced South American acreage has already been incorporated into farmers' soybean price outlook, poor weather conditions or economic disruptions would lift price expectations.

Farmers also are awaiting the outcome of the GATT negotiations and watching for U.S. actions under the section 301 case that was decided against the EC's oilseed policies.

California Drought To Limit Cotton Area?

The outlook for other oilseed acreage is more bullish. Depressed prices for com-

The 1990 Farm Act & Oilseeds: Some Background

Planting Flexibility: The maximum payment acreage was cut by 15 percent. However, farmers are free to grow other crops on this acreage (called Normal Flexible Acres), excluding fruits and vegetables, without loss of crop acreage base. Farmers seeking more flexibility may use an additional 10 percent of their base, although deficiency payments must be foregone on these acres.

Oilseeds Marketing Loan: Mandatory nonrecourse marketing loans were established for soybeans and selected minor oilseeds. Marketing loans act to insulate producers from downside price risks while discouraging forfeitures to the CCC. Farmers are allowed to repay the loans at less than the loan rate when world prices are low.

The loan rate for soybeans is set at \$5.02 per bushel and 8.9 cents per pound for minor oilseeds (sunflower seed, canola, rapeseed, safflower, mustard seed, and flaxseed). All loans are subject to a 2-percent origination fee, meaning that the effective loan rates are \$4.92 for soybeans and 8.72 cents for the other eligible oil crops.

0-92: The 0-92 program was modified to allow farmers seeking additional flexibility the option to plant minor oilseeds on eligible program acreage while still receiving up to 92 percent of their deficiency payments. However, farmers electing to do this are not eligible for the marketing loan. The 0-92 option does not apply to soybeans.

peting crops and increased flexibility are expected to lead to more acres this spring.

Although cotton is grown in the U.S. primarily for lint, the byproduct, cottonseed, is the nation's second largest oilseed crop. Driven by high prices and a lower Acreage Reduction Program (ARP) requirement, cotton area likely will increase significantly this year. The

cotton ARP for the 1991 crop was set at 5 percent, down from 12.5 percent last year. Cotton also is expected to expand in some areas where soybeans and wheat are traditionally grown.

With average cottonseed yields of roughly half a ton per acre, farmers' intentions to plant 2.3 million more acres of cotton would boost supplies significantly. However, persistent drought in California, the second largest cotton producing state, could hamper farmers from realizing their early-season intentions (see the Resources Department).

The acres allocated to other oilseeds are expected to increase as well. Many of these crops are suited to growing conditions in the Plains where they compete with wheat and barley. In the past, high support prices and rigid program regulations discouraged oilseed production.

However, a record world wheat crop in 1990 and a lagging export market have depressed wheat prices. Coupled with the price protection of the new marketing loan, minor oilseeds likely are an attractive alternative for the estimated 3-3.5 million acres of spring wheat Normal Flexible Acreage (NFA) that are no longer eligible for deficiency payments.

Modification of the 0-92 provisions also allows farmers to plant certain minor oilseeds on their crop acreage base while maintaining their deficiency payments. Like the NFA provisions, these provisions increase the attractiveness of planting oilseeds.

Of the minor oilseeds, oil-type sunflowers are a leading contender for the most significant acreage gain. Many farmers on the Plains are familiar with sunflowers and have access to established sunflower markets.

Prices have firmed in recent weeks in response to strong domestic demand for vegetable oil and export activity stimulated by the Sunflower Oil Assistance Program. Growing demand as a preferred ingredient in birdfeed and a forecast decline in South American production also brighten prospects for sunflowers in 1991.

Commodity Spotlight

Shifts to lesser known oilseeds such as flaxseed, canola, rapeseed, safflower, and mustard probably will be limited and concentrated in regions where production is proven.

The full impact of the new farm program's flexibility provisions will not be felt until 1992. The 1991 winter wheat crop was planted before the farm bill passed, meaning some farmers were held back from switching to canola and rapeseed.

Farmers thinking about planting oilseeds this spring are waiting for the operational details of the marketing loan program. And, for the first year, they may want to watch how the program operates before making a major switch in crops. *[Ian McCormick and Jim Schaub (202) 219-0840] AQ*

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World Agriculture and Trade



Record Grain Crops In China

China produced back-to-back record grain crops during the past 2 years after launching an all-out effort to revive output. The bumper crops—nearly 408 million tons in 1989 and over 425 million in 1990, including soybeans and potatoes—have allowed China to begin cutting net grain imports by buying less wheat and selling more corn. However, China's government expects grain output to level off this year.

China's corn exports are aggressively replacing U.S. sales to East and Southeast Asia. And the U.S. share of China's wheat imports during 1990 and 1991 is probably down to 35 percent from nearly 50 percent during the previous 2 years. In 1988/89, China was the biggest importer of U.S. wheat.

Before rebounding in 1989, China's grain output fluctuated between 379 and 403 million metric tons. Earlier it had peaked at around 407 million in 1984. Stagnation in the grain sector, along with a rising population, reduced China's per capita grain output from 395 kg in 1984, or just slightly below the world average, to only 360 kg in 1988.

Faced with mounting net grain imports, China's government was determined to boost output. In 1989, the central government began to increase state agricultural investment and encouraged local governments to set aside funds to build agricultural capital. To encourage farmers to grow grains and to offset high inflation, the government raised quota procurement prices nearly 20 percent.

The government also recentralized input distribution to ensure that fertilizer allocated to grain production actually reached farm households. Moreover, China's leaders again began using administrative fiat, primarily through the party, to force farmers to grow more grain.

All of these measures, coinciding with excellent weather, resulted in the record grain crops of the past 2 years. But while production hit alltime highs, output per person averaged 365 kg in 1989 and 375 kg in 1990—still below the 1984 high.

Storage and Procurement Posed Problems

The government lagged behind in granary construction. In December, the Ministry of Agriculture reported that 25-30 million tons of the 1990 grain crop were stored out in the open, although almost 8 million tons of new storage capacity had been built by the state grain authorities that year.

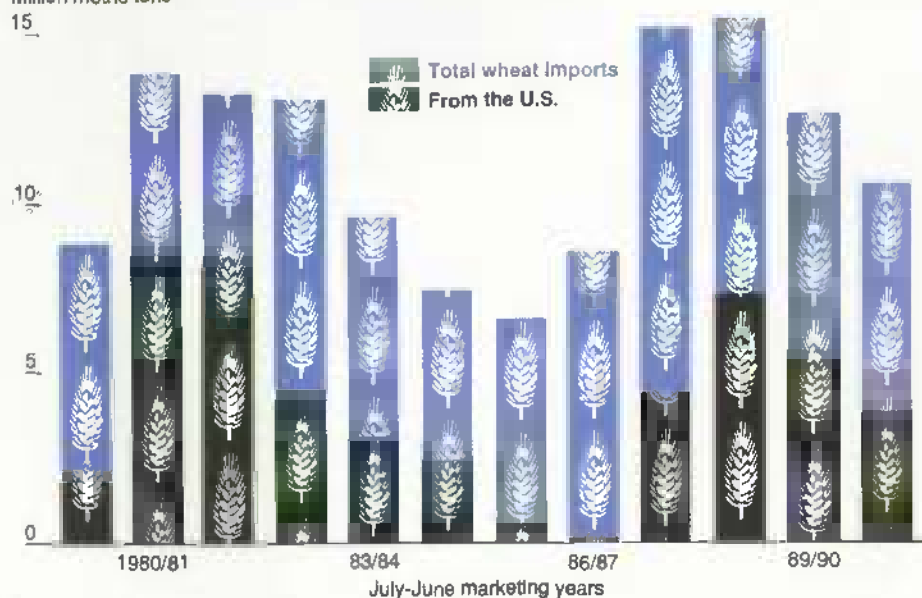
Despite these problems, the government nevertheless wanted to maintain incentives for farmers to grow grain. In 1990, the government set guaranteed prices at 0.96 yuan per kg for wheat and 1.00 yuan per kg for rice (5.2 yuan = \$1).

The government will continue to use these prices to buy as much grain as farmers are willing to sell after completing their basic procurement quota. However, many localities reported in 1990 that farmers found it difficult to sell grain to the government because many procurement stations had exhausted their appropriated funds.

World Agriculture and Trade

Recent Record Crops Push Down China's Wheat Imports

Million metric tons



1990/91 forecast

China's Grain Output Rebounds

Year	Total	Rice (rough)	Wheat	Corn
Million metric tons				
1981	325.0	144.0	59.6	59.2
1982	354.5	161.6	68.5	60.6
1983	387.3	168.9	81.4	68.2
1984	407.3	178.3	87.8	73.4
1985	379.1	168.6	85.8	63.8
1986	391.5	172.2	90.0	70.9
1987	403.0	174.3	85.9	79.2
1988	394.1	169.1	85.4	77.4
1989	407.6	180.1	90.8	78.9
1990	425.0	185.0	96.5	88.0

Sources: for 1981-89—China Statistical Yearbook 1990; for 1990 total grain—China's Ministry of Agriculture; for 1990 rice, wheat, and corn—USDA, February 1991 estimates.

The guaranteed procurement prices will remain valid through 1991. However, China's Ministry of Agriculture has recently revealed that the 1991 grain output target is 425 million tons, similar to 1990's output. Although area planted to winter wheat was reportedly up about 260,000 hectares, officials expect that total grain area will be about the same as a year ago.

Some of the planned acreage will not be sown because of lower inflation-adjusted market prices and the difficulties farmers had in selling grain to the government last year. Furthermore, government offi-

cials there do not expect 3 years of back-to-back good weather.

In the mid-1980's, China's authorities set grain production targets of 450 million tons by 1990 and 500 million by 2000. While the 1990 target was not met, China's 10-year planning program (1991-2000) and the Eighth 5-Year Plan (1991-1995) retained the 500-million target.

The target will have to be fulfilled primarily through yield increases. There is only limited potential to expand cultivated area. Achieving the target appears to depend entirely on the government's ability to allocate resources to improve

the entire production process. And even if the target is met, per capita grain output likely will be less than in 1984 because of population growth.

Self-Sufficiency Hinders Growth

In the past 10 years, rural reforms and policy changes have contributed to substantial growth in the rural economy. Regional crop specialization, development of the livestock sector, and a more open trade policy have led China to expand its international grain trade. Even though domestic wheat output grew 62 percent in the last 10 years, China has remained a leading world wheat importer.

Yet China has not changed its traditional policy goal of food self-sufficiency. Over the past four decades, this policy has driven all provinces and regions to develop their own food supplies.

As China achieves a greater degree of food self-sufficiency, less grain will be transferred between provinces or regimes, slowing the growth of China's infrastructure, particularly its food marketing and storage reserve systems. Increasing centralized controls and using administrative fiat probably over-emphasized grain production and have been costly.

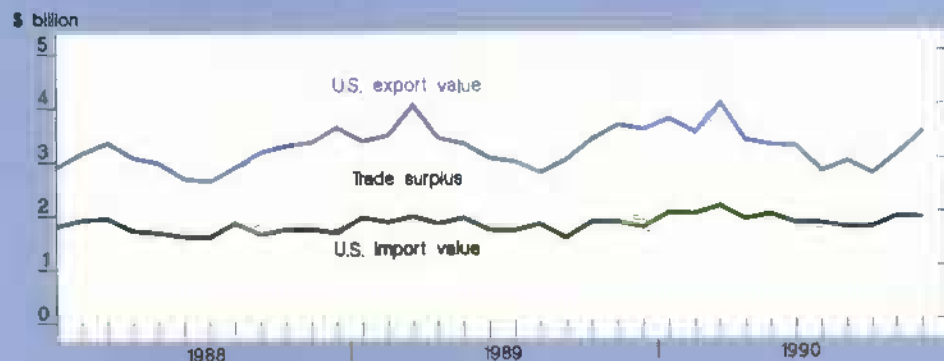
For example, China's 1990 and 1991 guaranteed wheat procurement price of 0.96 yuan per kg equals \$185 per ton. Currently, world wheat prices are only about one-half the guaranteed price, ranging from a low of \$70 (for countries receiving large export subsidies) to around \$110. Thus, by importing only a few more million tons of wheat from foreign sources, the government could save hundreds of millions of dollars.

Moreover, China can afford to import more. China's foreign exchange reserves have risen dramatically. In 1990, the nation's merchandise trade surplus amounted to nearly \$9 billion. However, the government has tried to limit annual net grain imports to around 10 million tons, citing a shortage of foreign exchange, as well as the need to use the

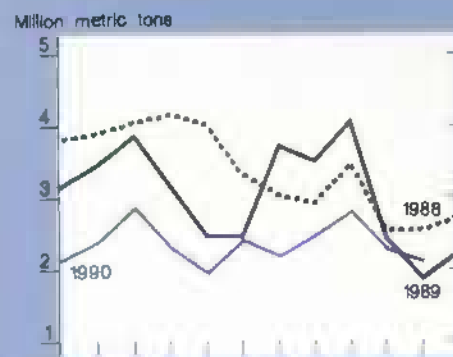
U.S. Trade Indicators

World Agriculture and Trade

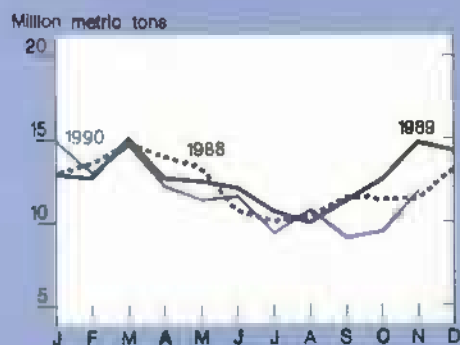
U.S. agricultural trade balance



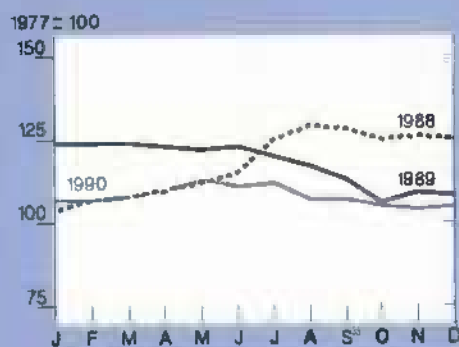
U.S. wheat exports



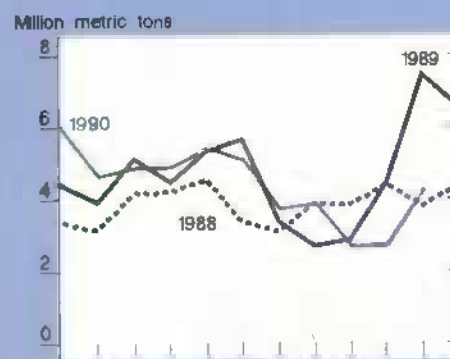
Export volume



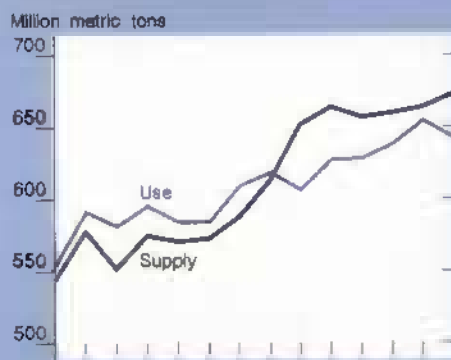
Index of export prices



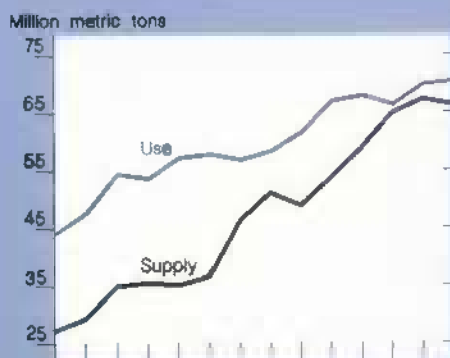
U.S. corn exports



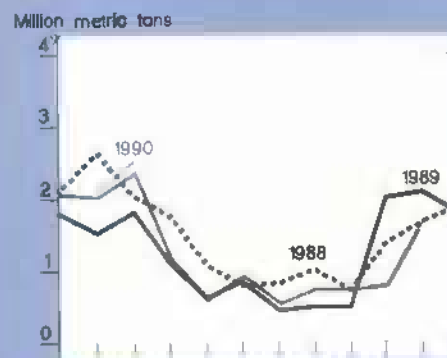
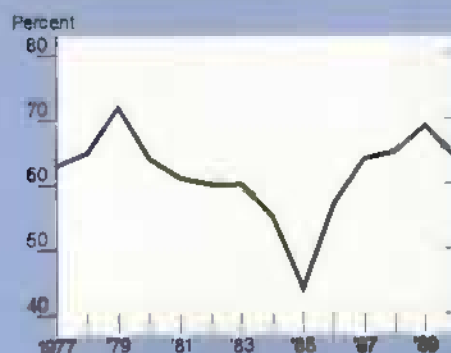
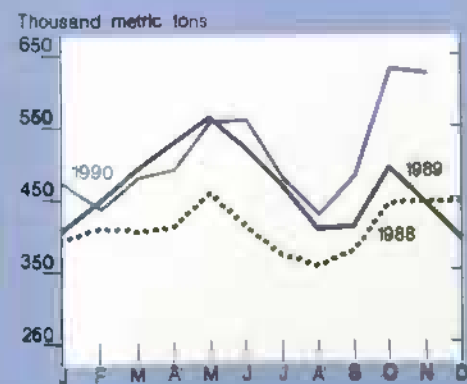
Foreign supply & use of coarse grains



Foreign supply & use of soybeans



U.S. soybean exports

U.S. share of world coarse grains exports^{1,2}U.S. share of world soybean exports^{1,2}U.S. fruit & vegetable exports³

¹Excluding intra-EC trade. ²October-September years. ³Includes fruit juices.

World Agriculture and Trade

foreign exchange to buy imported technology and equipment for industrial development. [Francis C. Tuan (202) 219-0626] **AO**

FTA Affects U.S. - Canadian Ag Trade

The U.S.-Canada Free Trade Agreement (FTA) has been in effect a little over 2 years and has advocates and detractors in both countries. Although bilateral trade continues to expand, several disputes have arisen since the agreement's inception. The results of the FTA may spark even more interest in the U.S. with the possibility of a trilateral agreement between the U.S., Canada, and Mexico.

So far, the FTA's impact on agriculture has been relatively limited compared with other sectors. That's because both countries wish to retain their domestic price support programs, at least for now. Nevertheless, there has been some liberalization of tariffs, export subsidies, certain nontariff barriers, and technical regulations.

Additionally, both countries have pledged to develop rules and disciplines on subsidies and dumping, which have been contentious agricultural issues. However, no progress has been made yet. The FTA also provides for bilateral panels to settle disputes under existing countervailing duties or anti-dumping laws.

U.S. Processors Benefit from FTA

The complete removal of tariffs by 1998 for all products eventually will force Canadian food processors to become more competitive with their U.S. counterparts. In many cases, U.S. processors have lower production costs due to larger operations, diversity of production, and lower input costs. U.S. food processors should benefit from greater exports to Canada in the short run.

Canadian processors typically have lower productivity than U.S. processors, but some equalization can be anticipated in the long run. Canada already has attempted to lower input costs for grain processors. And the decision to remove oats from the Canadian Wheat Board's jurisdiction and let the market determine prices was taken in part to encourage processing of oat products.

Canada also has assisted its millers by discontinuing its two-price wheat policy, where domestic wheat was often priced higher than exported wheat. Starting in January 1991, the domestic wheat price was established off the Minneapolis market for red spring wheat and the Chicago market for soft white spring wheat. This should narrow the long-standing price spread between Canadian and U.S. wheat for domestic millers.

Ag Trade Has Grown Faster

In January 1990, the U.S. changed the method of reporting its exports to Canada. Canadian import data were substi-

tuted for U.S. export data that historically underreported shipments to Canada. The adjustment led to an almost 40-percent increase in reported U.S. agricultural exports to Canada for 1990. When using Canadian import data, U.S. agricultural exports to Canada actually rose 17 percent in 1990 from a year earlier. Data prior to 1990 have been adjusted in this article to reflect the change.

In 1989, according to the adjusted data, agricultural trade between Canada and the U.S. grew faster than overall agricultural trade. However, the precise effect of the FTA is difficult to isolate.

The North American drought strongly affected trade in 1989. Because of the drought, Canadian agricultural exports declined while U.S. exports grew more slowly. For some commodities, bilateral trade rose to cover the other country's production shortfalls.

In 1990, U.S. agricultural exports dipped slightly. Yet, U.S. agricultural exports to Canada grew even faster than a year earlier and at a faster pace than Canadian agricultural exports to the U.S. In contrast, Canadian agricultural exports to the U.S. rose by a smaller amount than a year ago and at a slower rate than total Canadian agricultural exports.

The FTA requires import licenses for Canadian wheat, barley, and oats to be removed when U.S. support is less than or equal to Canadian support, based on a 2-year average of government support. As a result, import licenses on oats and oat products already have been removed. But there have not been any significant impacts on U.S. trade. The U.S. has been a net importer of oats since the early 1980's.

More significant would be Canada's removal of import licenses on wheat and wheat products. U.S. millers and bakers, who possess a competitive advantage, have been largely excluded from this market due to the licensing requirement. The 1991 calculation of government support, to be released on May 1, 1991, will be based on the average of 1988/89 and 1989/90 support levels. In 1988/89, U.S. support was far less than Canada's.

U.S. Agricultural Exports to Canada Have Expanded

Agricultural exports	1987	1988	1989	1990
\$ billion				
U.S.:				
Total	30.9	37.1	40.0	39.5
To Canada	2.9	3.2	3.6	4.2
Canadian:				
Total	7.2	8.3	7.4	8.1
To the U.S.	2.2	2.4	2.9	3.2

U.S. shipments to Canada reflect Canadian import data. Calendar year data
Source: Statistics Canada

A year ago, Canada and the U.S. agreed to a 1-year experiment of an open border for trade in meat and poultry. An open border would eliminate port-of-entry inspections in both countries. Nevertheless, implementation of the open border has been delayed following Congressional and other opposition.

USDA's Food Safety and Inspection Service held a comment period, and a decision whether to implement the open border will not be made until all the comments have been reviewed. In the meantime, random reinspections of Canadian meat will continue at the border.

Dispute Panels Proceed Slowly

Two FTA dispute settlement panels recently have ruled on U.S. countervailing duties placed on imports of Canadian pork. The first panel questioned the U.S. International Trade Commission's (USITC) decision that Canadian federal and provincial subsidy programs for hogs resulted in greater exports, causing significant injury to U.S. pork producers. The USITC's ruling used an incorrect conversion factor that inflated the volume of Canadian pork production.

The USITC reviewed its finding using the correct conversion factor and upheld its decision in October 1990. Canada subsequently filed for another investigation and on January 22, 1991, the dispute settlement panel determined that the USITC's injury ruling was based on theory rather than conclusive evidence. The USITC reviewed its finding a second time and issued a decision on February 12.

The USITC ruled that U.S. hog producers are not threatened with injury from imports of fresh, chilled, or frozen pork from Canada. In the absence of any appeals, this will lead to the eventual elimination of the countervailing duty and will require the U.S. to refund the deposits collected since the duty was imposed in May 1989.

The exact timetable will depend on the appeals process selected. U.S. producers may request either a review of the ruling

or mount an extraordinary challenge to the panel's finding.

If neither is filed, a notice of closure to the panel is filed and there would be a 30-day period to mount a constitutional challenge to the law before either the Court of International Trade or the U.S. Court of Appeals. At this time, the National Pork Producers' Council has not indicated that it will appeal, but would prefer for Congress to hold hearings to determine the powers of the settlement panel.

The second dispute panel agreed with the U.S. Department of Commerce that subsidy programs for hogs pass through to pork producers. However, the panel required the Commerce Department to determine whether all of the subsidies from each of the federal and provincial programs affecting pork pass through to pork producers. The Commerce Department responded to this last November by upholding the countervailing duty, but reduced the levy to 6.6 cents (Canadian) per kilogram from 8 cents.

Both cases have been under various forms of panel review since autumn 1989. Because one of the rationales for the dispute panel was to improve upon the GATT dispute process, the expediency of the binational panel versus a GATT panel has been questioned.

Export Subsidies Are Being Disputed

Export subsidies and alleged dumping of Canadian grain have been troublesome issues. The FTA removed the rail subsidy granted by the Western Grain Transportation Act (WGTA) on grain and oilseed shipments to the west coast that are exported to the U.S. But continuing the transportation subsidy to Thunder Bay, Ontario, created tension over Canadian durum wheat exports.

Canadian durum exports to the U.S. rose substantially from 1985 to 1989. North Dakota durum producers cited the WGTA as the cause. Bilateral export subsidies are not allowed under the FTA. A U.S. Trade Representative study determined that the WGTA was not in violation of the FTA since subsidies currently

granted under the WGTA apply equally to shipments destined to Canada's domestic and export markets.

U.S. durum producers have accused the Canadian Wheat Board, Canada's sole legal exporter of wheat and barley, of exporting below the acquisition price. This would mean exporting wheat to the U.S. below the support price the Board offers to Canadian producers.

Because the Canadian Wheat Board does not publish sales prices, it is impossible to know at what price the Board sold wheat to the U.S. However, in 1990 the USITC noted that the North American drought of 1987-89 was a significant reason for increased imports of durum.

The U.S. also has been a target of Canadian criticism for using the Export Enhancement Program in Canadian markets such as Algeria, Brazil, and the Soviet Union, which Canada claims are not traditional EC markets. The Canadian government regards this as a possible violation of the FTA because it claims that the U.S. failed to recognize Canada's export interests when using an export subsidy on shipments to other countries. [Mark Simone (202) 219-0610] AO



Farm Finance



Ample Credit Is Available

Farmers remain cautious about taking on additional debt. Adjusted for inflation, U.S. land values have been stable and farm income is forecast to decline slightly this year. Moreover, planted area is expected to remain fairly steady while livestock supplies are forecast to show mild growth. So, in real terms, farmers as a group will use less credit in 1991 than a year earlier. Nominal farm debt may increase slightly, though.

On the supply side, farm lenders are showing signs of excess capacity, especially the commercial banks. Creditworthy farmers wishing to expand will be able to secure financing on more favorable terms than a year earlier.

U.S. farm debt likely declined to \$134 billion in 1990, down an inflation-adjusted 5.2 percent from a year earlier and 48 percent from the 1980 peak. The Farmers Home Administration (FmHA) accounted for the bulk of the 1990 decline by cutting direct lending and by writing off uncollectible loans.

The drop in FmHA loan volume, along with a slight decrease in farm loans held by life insurance companies and a smaller lender category of "individuals and others," offset the loan growth posted by the Farm Credit System (FCS) and commercial banks.

Commercial banks increased their share of farm loans outstanding for the seventh straight year and continue to hold more than any other type of farm lender. Banks now hold approximately 44 percent of farm loans made by the four major lending groups.

The FCS probably experienced its first increase in market share since 1980, up 1.4 percentage points to slightly over 34 percent. This makes it the second largest farm lender. Insurance companies' share of the market held constant at slightly over 8 percent, but is likely to rise this year.

Loan Quality Is Stable

For the first half of 1990, the delinquent portions of lenders' loan portfolios were mostly steady. The FCS and life insurance companies experienced slight

increases in the share delinquent, while the delinquency rate for commercial banks was flat, and FmHA's was down. Loan chargeoffs were down for the FCS and the commercial banks. All lenders continued to divest themselves of farm properties acquired through foreclosures.

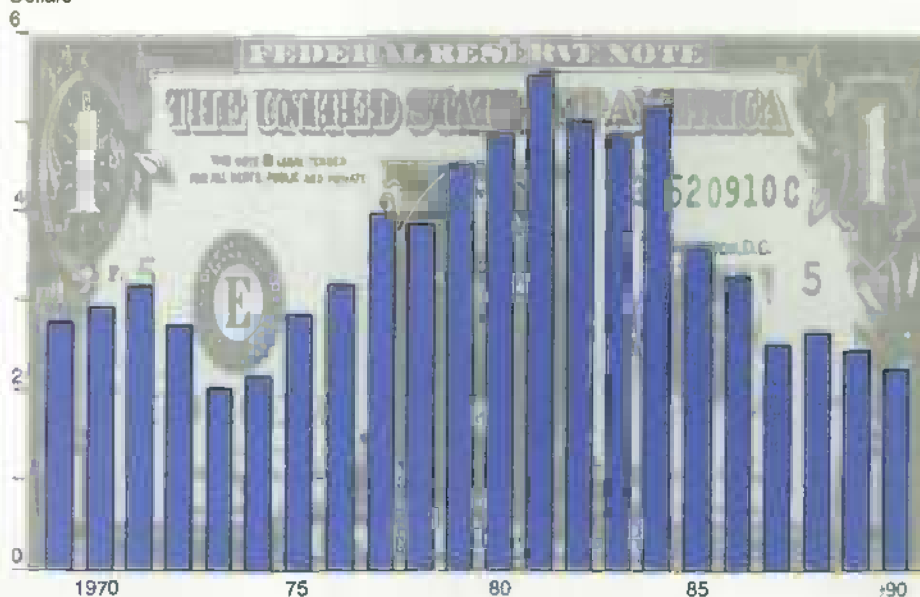
Farm banks continued to rebound, posting an annualized return on assets of over 1 percent and a return on equity of 11.2 percent for the first half of 1990—the highest since 1983. Capitalization, at 10.2 percent of assets, means most banks would be able to survive any short-term farm financial downturn.

At the farm banks, loans amounted to 55.3 percent of deposits at midyear, down slightly from a year earlier. This indicator of lending capacity is still below historical proportions and the proportions desired by management. So, the bankers wish to extend more credit to qualified borrowers.

Nonreal estate delinquent farm loans remained at 2.5 percent of the portfolio held by commercial banks, while net chargeoffs were less than 0.1 percent of loans as of June 30. Holdings of acquired property fell as banks took

Lower Debt and Higher Income Boost Farmers' Financial Health

Dollars

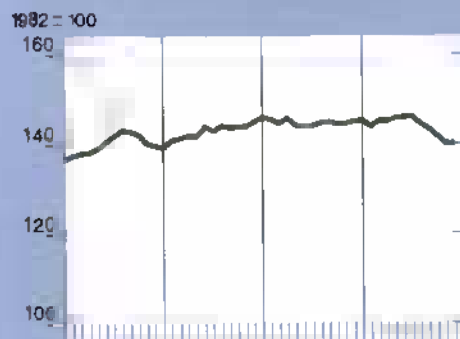


Farm debt per dollar of net cash income.

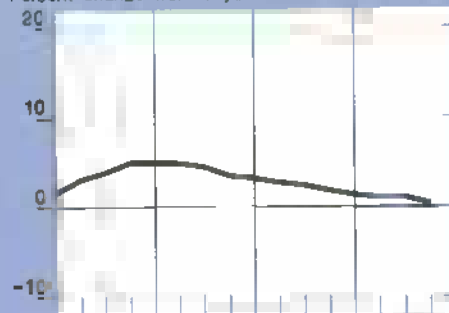
General Economic Indicators

Farm Finance

Composite leading economic indicators

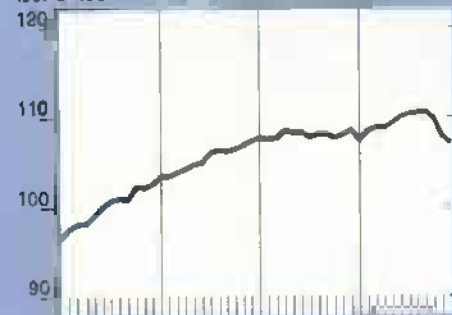
Gross national product¹

Percent change from a year earlier

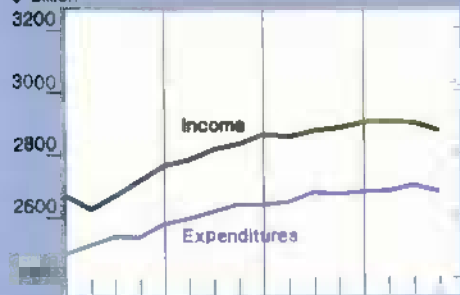


Industrial production

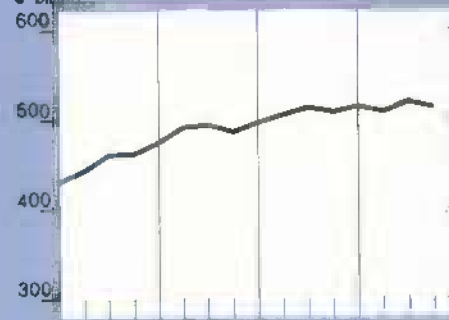
1987 = 100

Disposable income and consumption expenditures²

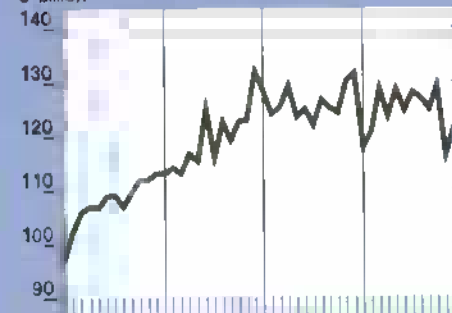
\$ billion

Nonresidential fixed investment²

\$ billion

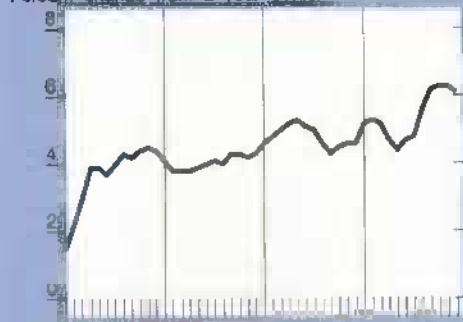
Manufacturers' durable goods orders³

\$ billion

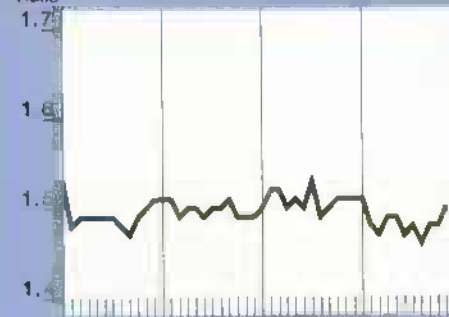


Consumer price index

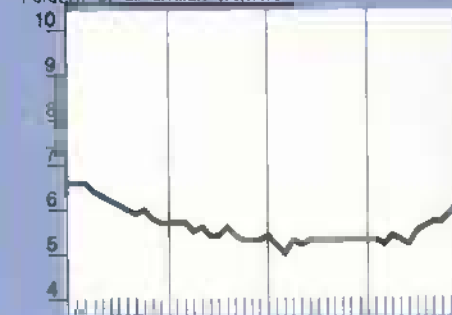
Percent change from a year earlier

Inventory/sales⁴

Ratio

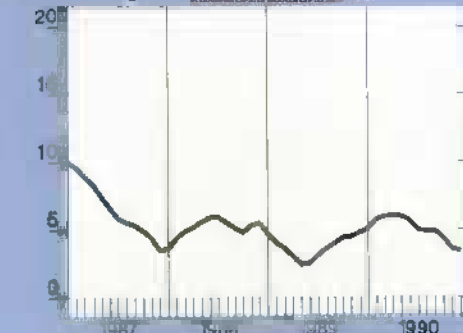
Unemployment rate⁵

Percent of all civilian workers



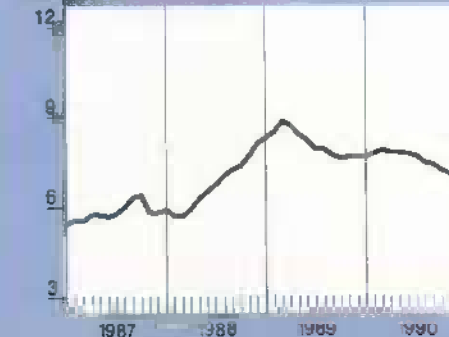
Money supply (M2)

Percent change from a year earlier

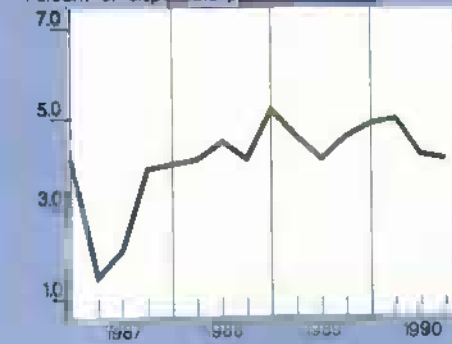


3-month Treasury bill rate

Percent

Savings rate⁶

Percent of disposable personal income

¹Percent change from a year earlier in 1982 dollars. Seasonally adjusted annual rates. ²Billions of 1982 dollars, seasonally adjusted at annual rates.³Nominal dollars. ⁴Manufacturing and trade, seasonally adjusted; based on 1982 dollar. ⁵Seasonally adjusted.⁶Calculated from disposition of personal income in 1982 dollars, seasonally adjusted at annual rates.

Sources: U.S. Dept. of Commerce, U.S. Dept. of Labor, and the Board of Governors of the Federal Reserve System.

Farm Finance

Agricultural Lenders Continue To Rebound

Lender and date	Delinquent loans 1/	Share of portfolio 2/	Net loan chargeoffs	Share of portfolio 3/	Value of acquired property 4/
	\$ mil.	Percent	\$ mil.	Percent	\$ mil.
FCS 5/					
12/31/84	5,689	8.7	428	0.5	496
12/31/85	6,465	9.7	1,105	1.4	928
12/31/86	8,137	14.9	1,321	1.9	1,093
12/31/87	5,749	11.6	488	0.8	873
12/31/88	3,757	7.3	413	0.8	661
12/31/89	2,812	5.5	-5	0.0 6/	461
6/30/90	2,896	5.7	17	0.0 6/	363
FmHA 7/					
6/30/84	5,937	21.3	117	0.5	NA
6/30/85	6,385	23.0	234	0.9	638
6/30/86	6,835	24.6	379	1.4	758
6/30/87	7,005	26.7	1,119	4.1	777
6/30/88	8,750	34.5	2,022	7.8	633 8/
6/30/89	8,700	37.1	3,229	12.9	609
6/30/90	6,666	33.4	NA	NA	474
Commercial banks 9/					
12/31/84	2,100	5.2	900	2.3	NA
12/31/85	2,600	7.3	1,300	3.3	NA
12/31/86	2,200	7.0	1,200	3.4	414
12/31/87	1,509	5.2	535	1.7	438
12/31/88	1,062	3.5	140	0.5	400
12/31/89	766	2.5	97	0.3	340
6/30/90	790	2.5	15	0.0 6/	328
Life insurance companies					
12/31/84	1,167	9.6	NA	NA	NA
12/31/85	1,717	15.1	NA	NA	692
12/31/86	1,783	17.0	NA	NA	1,442
12/31/87	1,330	14.3	NA	NA	1,619
12/31/88	808	8.9	NA	NA	1,226
12/31/89	426	4.7	NA	NA	1,110
6/30/90	479	5.2	NA	NA	832

NA=not available. 1/ Includes, for commercial banks and FCS, loans past due 90 days or more and still accruing interest plus loans in nonaccrual status; for FmHA, only principal and interest payments more than 15 days past due; for insurance companies, loans past due 90 days or more plus those in process of foreclosure. 2/ As a percentage of all such loans held at the end of the period. 3/ As a percentage of all such loans held at the beginning of the period. 4/ Excludes property held by the Bank for Cooperatives. 5/ 1984 figures not comparable, was a transition year to new accounting principles. Also, Farm Credit Administration guidelines changed in 1990. 6/ Less than 0.05 percent. 7/ Includes only data for Farmer Loan programs. Net loan chargeoffs are for the fiscal year. 8/ Decrease from previous period may reflect changes in reporting procedures. 9/ Estimates for bank-held farm nonreal estate loans. Beginning 12/87, chargeoffs do not include losses qualified for deferred loan loss program.

advantage of stable land prices to sell the properties.

With 18 farm bank failures in 1990 and only 23 weak farm banks at midyear, it is apparent that the stresses of the farm financial crisis continue to dwindle. In fact, farm banks are now among the healthiest groups of banks as problems at larger urban banks continue to mount.

A farm bank is a commercial bank with an above-average concentration of farm loans. As of mid-1990, all banks with more than 16.1 percent of their loans for farming were classified as agricultural banks.

Direct FmHA lending during fiscal 1990 dropped \$200 million, slipping below \$1 billion for the first time since 1972. Obligations will continue to trend down because of cuts imposed by the 1990 Budget Reconciliation Act. Guaranteed lending has not made up for the decline in direct lending, but was up somewhat this past year. Outstanding direct loan volume dropped below \$20 billion for the first time in a decade. FmHA is continuing to shift from direct to guaranteed loans.

Through aggressive loan restructuring and increased foreclosures, FmHA is finally reducing its pile of delinquent

loans. At mid-1990, delinquencies stood at \$6.7 billion, down \$2 billion from a year earlier. Net chargeoffs by the agency continue to be high.

FCS Is Using More Rescue Funds

The financial condition of FCS institutions continued to gradually improve during 1990. Loan volume rose slightly to \$51.1 billion and credit quality improved. Net interest income and other income increased while some expenses fell compared with a year earlier.

Some institutional and regulatory changes obscured the underlying improvement in the FCS performance. Net income declined during 1990 because less money was taken out of loan loss reserves, funds were used to repurchase high-cost FCS debt, and less money was made on the sale of foreclosed properties. New accounting guidelines issued by the Farm Credit Administration (FCA, the FCS regulator) required several System banks to reclassify more of their loans as nonaccruing.

Some FCS institutions remain in weak financial shape. While the last of the Jackson Federal Land Bank's receiver-ship assets and liabilities were disposed during the year, there are four other Farm Credit Banks (of St. Paul, Louisville, Omaha, and Spokane) that have received assistance under the Farm Credit Act of 1987. Most recently, the Spokane bank received assistance in the third quarter of 1990. In total, \$1.26 billion of the \$4-billion line of credit authorized by the Act has been used.

Delinquent loans held by life insurance companies fell more than 40 percent during the 18 months that ended in June 1990, and the value of acquired properties declined 32 percent to \$830 million. Life insurance farm mortgage foreclosures totaled \$204.4 million in 1989, down from the 1986 peak of \$827.5 million. They totaled \$42.1 million the first half of 1990, and \$3.5 billion during 1980-89.

Farm debt held by life insurance companies has declined 28 percent since 1981, but is projected to increase slightly in 1991. Much of the increase will be in relatively large loans.

Farmer Mac Yet To Take Off

Manufacturers Hanover, in conjunction with First Boston Corporation and U.S. Agrifund, announced plans to initiate a market for rural housing mortgages through Farmer Mac last spring. But they have yet to make their first offering. A farm-backed offering is planned for a later date.

Farmer Mac's startup has been hindered by regulatory capital requirements for the retained portions of the loans sold, regulatory lending limits for banks, problems standardizing agricultural loans, problems making the securities competitive, excess funds available at agricultural banks, and the increase in the difference between short- and long-term interest rates.

The FCS faces significant hurdles as well. FCS institutions must meet a 7-percent capitalization standard by 1993 that will require some of them to make substantial additions to current capital or sell assets.

By 1995, FCS bonds are to be self-insured through an insurance fund based on total loans outstanding. However, preliminary plans call for the fund to be collected and administered by the FCA. Further, each farm credit bank will be able to carry its contributions to the fund on its balance sheet, increasing the bank's capital. Some observers are concerned that these actions represent the resumption of the close relationship that existed between the FCA and member institutions before 1987.

Ag Banks Are Facing Reforms

This year, agricultural commercial banks likely will have to cope with: reform of the federal deposit insurance system, recapitalization of the deposit insurance fund, new investment and insurance powers, fewer restrictions on branch office location, and the merger of the three federal bank regulatory agencies.

Currently, the deposit insurance fund is paid for by covered banks through a flat fee per dollar of domestic deposits. So the most risky banks pay the same for protection as the most conservatively managed banks. Further, the government policy of "too big to fail" dictates that all deposits are covered by the FDIC when a large bank fails, but sometimes only deposits up to \$100,000 are covered when a small bank fails.

The smaller risk to depositors at big banks means the big banks can pay lower

interest rates than small banks. Rural and agricultural banks overwhelmingly fit into the "small" category. Large banks also have the advantage of not having to pay insurance premiums for foreign deposits.

In mid-February, bank industry representatives released a proposal to recapitalize the FDIC's bank insurance fund. The proposal needs regulatory approval and some legislation. The industry is calling for:

- the FDIC to raise \$10 billion by selling federally guaranteed bonds to the banks,
- the FDIC to charge the banks a higher insurance premium to repay the bonds equal to 4 cents for every \$100 in assets less capital, and
- the Federal Reserve System to lend up to \$2 billion of bank-owned reserves to the FDIC to help banks near failure to merge with more healthy institutions.

Big banks probably will resist the asset-based increase in insurance premiums, while the Fed will want to study the proposal to use bank reserves. [Douglas G. Duncan and Jerome Stam (202) 219-0892] **AO**



Resources



California Growers Face Drought

California growers are living through one of the state's longest and most severe droughts. And this year has been one of the driest ever recorded. The drought's magnitude and duration are overwhelming the state's sophisticated water system that provided normal water supplies through the first 3 years of the current drought and enough water last year to avoid major economic hardship.

Among California's livestock producers, those with forage-based operations will be hit the hardest. But the state's output of most fruits and vegetables will be near normal because some water will be diverted from field crops, and many growers depend on groundwater and water from the Colorado River Basin. Still, the output of many irrigated field and forage crops—cotton, rice, sugarbeets, and hay to name a few—will be down sharply and prices will rise.

California typically receives over 90 percent of its precipitation during October-May, so a few months remain in the typical California "wet" season. The forecast, however, is for only limited

relief. By the end of January, about half the water year's precipitation typically is on the ground. This year, sites in major river basins reported 10-30 percent of normal. There is only a 10-percent probability that precipitation and runoff will be normal this year.

The California surface water system depends largely on snows in the Sierra Nevada and Cascade Mountains running off into storage reservoirs in the spring for irrigation and urban uses in the summer. Reservoirs are about half of the normal early-February levels for the Bureau of Reclamation's Central Valley Project. Reservoirs supplying the California State Water Plan and other water systems, such as Los Angeles and San Francisco, are similarly low.

Grower Supplies Likely To Be Tighter

Allocations of irrigation water from surface sources will be cut by more than last year's 50 percent (see the September 1990 *Agricultural Outlook*). On February 5, the California State Water Project announced that it will deliver no water to its agricultural customers.

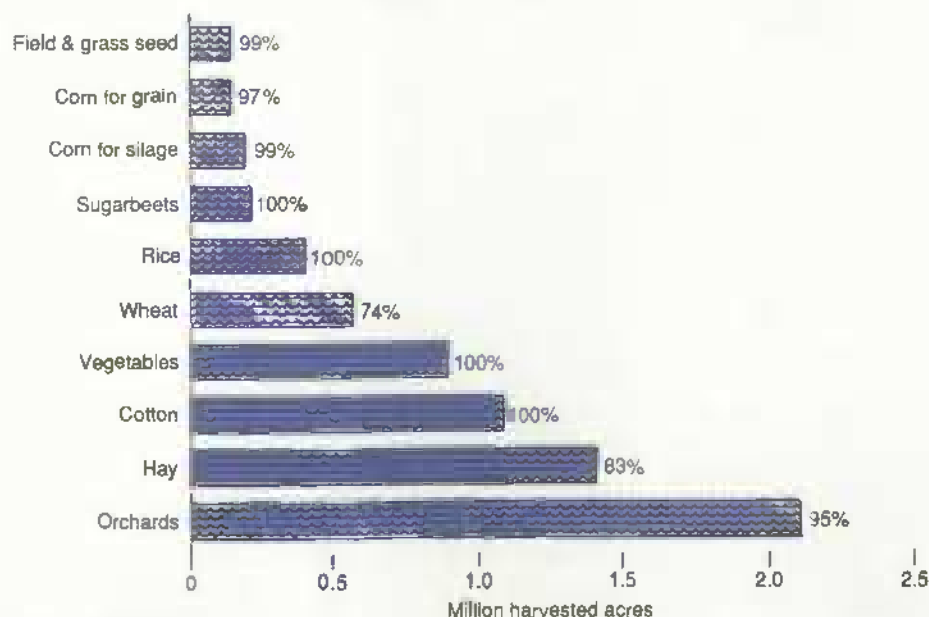
California's largest supplier of irrigation water, the Bureau of Reclamation, announced that it will deliver only 25 percent of normal supplies to agricultural customers. Water deliveries announced at this time are subject to change because 3 months of the precipitation season remain.

The state government is directing all communities to implement water conservation and drought management plans. These plans are to consider the case of a 50-percent reduction in water supplies. Drought pressures in rural areas are often the greatest, and many rural water systems are expected to run dry.

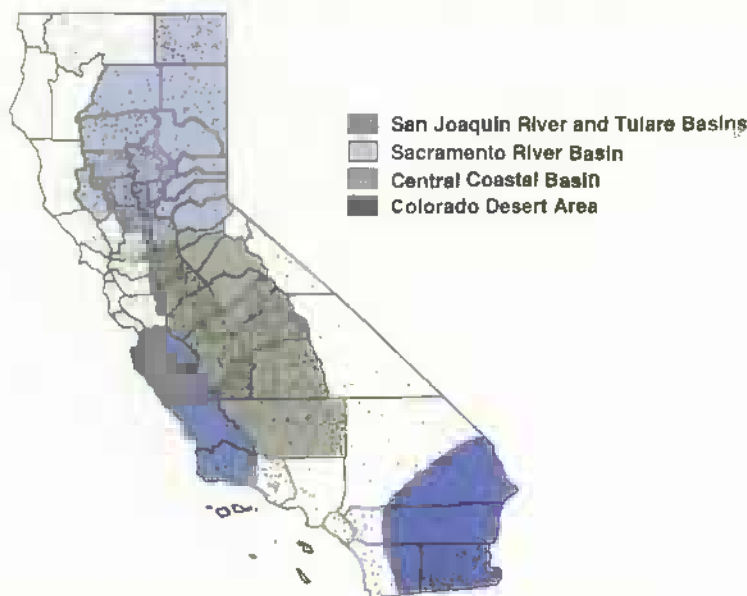
The state government has also announced it will buy this year's water allocations from willing agricultural sellers, pool it, and use it to help meet the most critical needs later in the year. The state would like to purchase at least 500,000 acre-feet of surface water to help meet this year's urban, agricultural, and environmental needs and to increase critically low storage levels. State purchases will involve idling agricultural lands or increasing groundwater use.

In a normal year, California's irrigated agriculture accounts for 82 percent of all fresh water withdrawals, of which 37

California's Crops Are Heavily Irrigated



Bulk of California's Irrigated Land Is In the San Joaquin River & Tulare Basins



1987 acreage data. 1 dot = 2,000 acres. Irrigation data accurate at the county level.

percent is returned to the hydrologic system. Surface water makes up about 60 percent of agriculture's supply in a normal year.

Last year, the drought reduced surface water availability, prompting groundwater use to rise to 60 percent of the total. The pressure to repeat the high groundwater use will be even greater this year. There is, however, some doubt that underground sources will be able to supply more.

The gap between agricultural demand and water supplies will widen. For example, if surface water suppliers are able to deliver 25 percent of normal supplies and ground water provides 60 percent of normal needs, there would be a shortfall of about 30 percent relative to a normal year. This is more than the 15- to 20-percent shortfall of 1990, and there will be some output losses.

The Options Have Narrowed

Last year, a statewide drawdown in reservoir stocks for all purposes of about 3.2 million acre-feet was required despite cuts in deliveries. The widespread availability of groundwater, the use of some

emergency supplies, reservoir draw-downs, conservation, and the innovative use of the water delivery infrastructure enabled growers to exchange water from different sources and suppliers to avoid widespread production losses. Irrigated output was reduced in some areas without access to alternative water supplies.

It now appears that last year's experience will not be repeated. There will be an economic impact from the 1991 drought. The question is how deep and how wide.

This year, there are only slim reservoir stocks to rely on. And, in contrast to last year, it is unlikely that more groundwater can be pumped because new wells cannot be added rapidly enough. Moreover, rising pumping costs may limit profitable withdrawals in some areas.

In fact, there is some evidence that less water will be pumped this year. Some aquifers were stressed by last year's full-bore pumping. The rate of groundwater mining has doubled or tripled in parts of the San Joaquin Valley compared to pre-drought years. There are reports of unprecedented water declines, with some wells going dry and others providing less.

Declining water quality from salt water intrusion is a concern in areas near the

coast. It is also a concern in areas pumping from aquifers over rocks made of compressed sea sediments. The rocks sometimes contain brackish water that is pulled up by high pumping rates.

Groundwater also will cost more. As groundwater levels decline, more energy is required for pumping. In addition, electric power, the energy source for 90 percent of the groundwater used for irrigation, will cost more per kilowatt hour. The drought has reduced the water available for local hydropower production. More expensive thermoelectric and imported power will be needed.

Another response last year was to trade current water supplies for compensation. For this to occur someone must have extra water to trade. This year, fewer producers will have it unless they cut crop output.

Last year, urban and agricultural water use reductions allowed the supply to be allocated so that widespread economic hardship was avoided. There are fears that this year may be different.

The State Water Resources Control Board met in emergency session to consider "temporary" suspension of agricultural surface water rights to ensure the minimum hardship to California's citizens. Even considering such a move is an unprecedented step.

Effects on Farming To Be Uneven

Preliminary water supply conditions allow farmers to start planning their response strategies. While it is too early to determine what adjustments will occur, some observations are possible.

Very poor range conditions and upward pressure on forage prices will put intense pressure on livestock farmers. Lower incomes and higher costs will hit forage-based dairy, beef cattle, and sheep producers. In light of the record-high beef prices, though, breeding herd inventories will be maintained as long as possible. Dairy producers, through marketing cooperatives, have some ability to pass a

Resources

part of the higher costs on to consumers. Beef cattle and sheep producers do not.

Vegetable and other annual specialty crop output probably will be near normal. These crops tend to be more profitable than most, so producers will place a high priority on irrigating them. Several important vegetable production areas, including the Salinas, Imperial, and Coachella Valleys, do not depend on current California precipitation for irrigation water supplies.

For example, the Salinas Valley and other areas in the Central Coastal Basin account for about 25 percent of California's vegetable acreage and depend almost entirely on groundwater. The Imperial and Coachella Valleys in the "Colorado Desert Area" grow about 15 percent of the state's vegetable output by drawing water from the Colorado River. Supplies there should be ample.

The production of orchard crops will be significantly reduced on the 5 percent of the state's orchard acres that are served by the State Water Project. Water from other sources will be needed to keep the orchards alive. In areas with limited water supplies, water will first be used to keep these high-investment perennials alive before seeking any production. Those areas not dependent on surface water will have little if any planned cuts in output.

The seven counties with the largest orchard acres, accounting for over 60 percent of the state total, are in the San Joaquin River Basin, one of the hardest hit areas in terms of surface water supply. Fortunately, most growers there have access to groundwater. But because of higher costs and limited water supplies, growers' net incomes in these counties stand to drop substantially.

There will be acreage reductions in field crops irrigated with surface water (cotton, rice, wheat, corn, and other feed grains). But by how much will only be known after planting.

It is even harder to quantify the impact of the prolonged drought on forests, wildlife, and ranges, although anecdotal evidence points to severe consequences.

Reports indicate the loss of 12 billion board-feet of timber from the drought and related pests. That's enough to build 1.2 million homes.

Wildlife and fishery numbers are declining. Significant water releases may be needed to adjust salinity and temperature to encourage spawning of threatened fish species. Water for these releases may be difficult to find.

Who Will Get The Water?

If the current trend continues, some hard choices must be made as to who has priority for the limited water supplies—farmers, the cities, or the environment.

On January 29, hearings were called by the California State Water Resources Control Board. Several points relating to the temporary modifications of agricultural surface water rights were discussed, including:

- ordering that perennial crops to get first priority for surface water;
- ordering that perennial crops be irrigated for survival and not production;
- limiting surface water use to only perennial crops, municipal uses, and minimum environmental flows; and
- relaxing minimum environmental levels.

It is too soon to predict which, if any, of these temporary modifications may become effective. Much depends on the precipitation in the next 3 months.

In the 1930's, California experienced 6 drought years. The state's population is about 5 times greater now. The current drought has lasted as long as any on record with this severity. And 1991 could be among the driest years on record. The February-April weather forecast calls for near-average precipitation for the state. [Noel Gollehon (202) 219-0410] **AO**

Food and Marketing



Food Price Increases Remain Muted

In 1991, U.S. retail food prices are expected to rise 2-5 percent. That's unchanged from the Department's first forecast, released late last November. The forecast is consistent with the current economic contraction, the Gulf war, and the freeze-damaged California fruit crops.

With larger domestic supplies of most foods, the war is unlikely to noticeably affect retail food prices. And while the California freeze will push up fruit prices, the effect on overall food prices will be slight. But a deepening of the California drought would add some uncertainty to this forecast (see the Resources Department).

Recession's Impact Will Vary

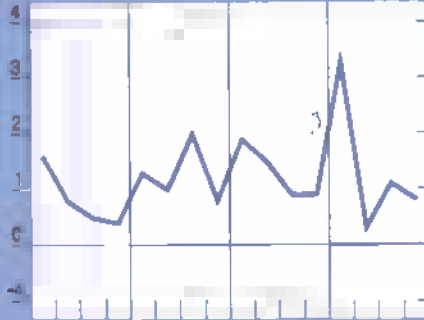
In 1990, for the second consecutive year, the Consumer Price Index for food averaged 5.8 percent above a year earlier. The gain was slightly larger than the 5.4-percent increase in the overall CPI.

Food and Marketing Indicators

Food and Marketing

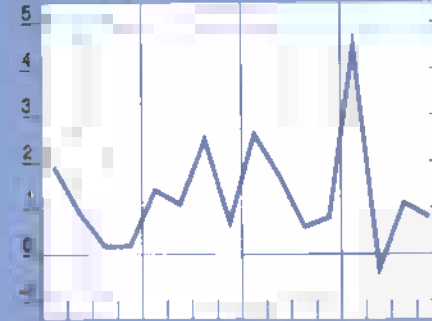
CPI: Total food^o

Percent change



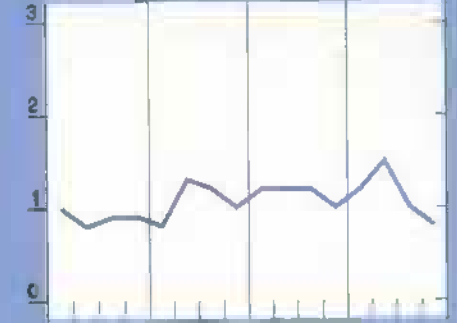
CPI: Food at home^o

Percent change



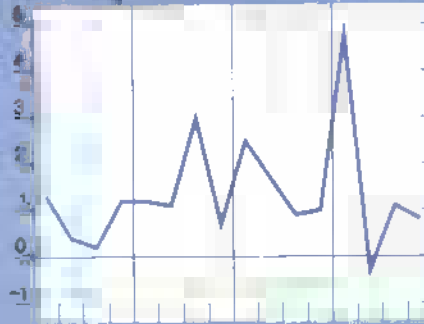
CPI: Food away from home^o

Percent change



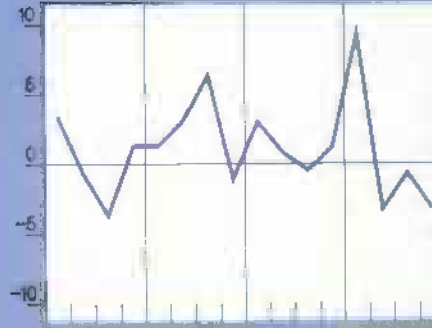
Retail cost of food¹

Percent change



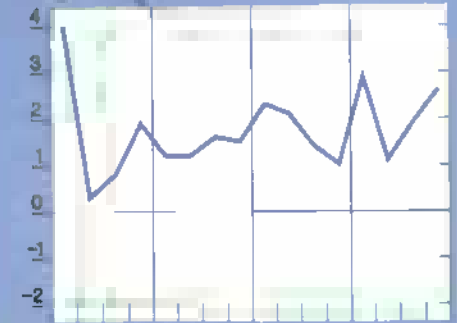
Farm value of food¹

Percent change



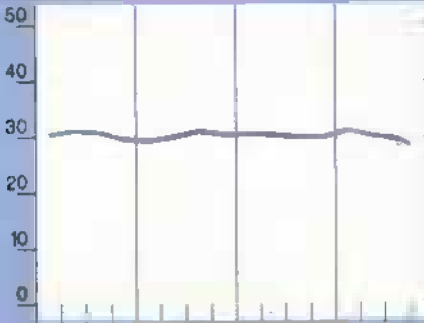
Farm-retail spread¹

Percent change



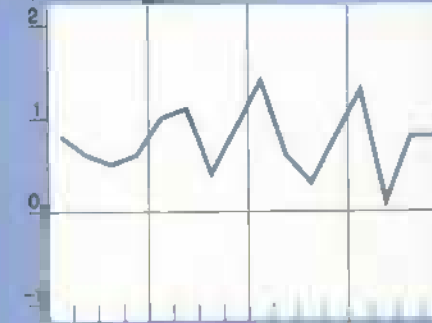
Farm value/retail cost¹

Percent



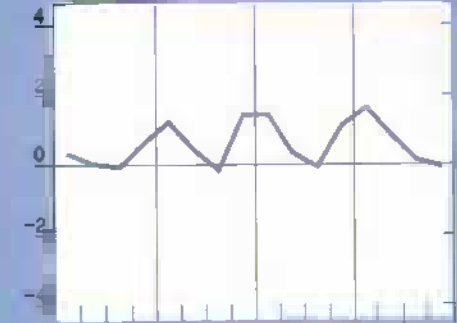
Food marketing cost index²

Percent change



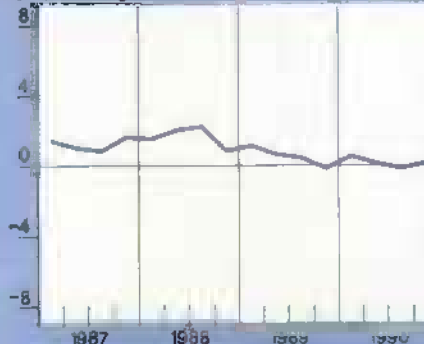
Index of hourly earnings^{3,4}

Percent change



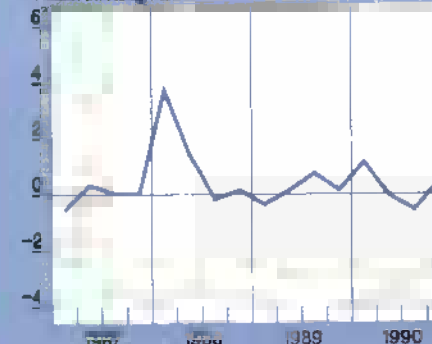
Index of packaging prices⁴

Percent change



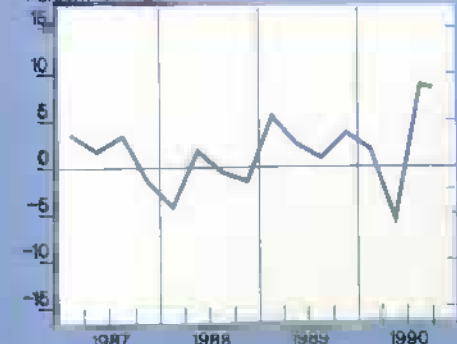
Index of rail freight rates⁴

Percent change



Index of energy rates⁴

Percent change



^oCPI unadjusted. ¹Index based on market basket of farm foods. ²Index of changes in labor, packaging, transportation, energy, and other marketing costs.

³In food retailing, wholesaling, and processing. ⁴Component of food marketing cost index.

All series expressed as percentage change from preceding quarter, except for "Farm value/retail cost" chart.

Food and Marketing

Prices for food sold in grocery stores last year averaged 6.5 percent above 1989, while food sold in restaurants and fast food establishments rose a more modest 4.7 percent. The CPI for food has risen at a faster pace than the CPI for all items for 4 of the past 5 years. That will not continue in 1991.

Consumer demand for food, especially food away from home, drops as employment and personal income recede. Inflation slows in time of recession, slowing increases in the labor, packaging, and transportation costs of processing and distributing food. In 1991, the recession will push down consumer demand and inflation, working to hold down food price increases.

But also during a recession, investments in plant and equipment are often postponed because producers lack confidence in the economy. Such production decisions tend to limit growth in food supplies and put upward pressure on retail food prices. This may partly explain the slow expansion in pork output last year and this year.

Freeze Lifted Fruit Prices

Seldom does cold weather damage crops in California. Nevertheless, the last 2 weeks of December saw below-freezing temperatures in the San Joaquin Valley. Nearly two-thirds of the California navel orange crop and about one-half of the valencia crop were wiped out.

Other fruits and vegetables were damaged as well, but this will have little if any effect on overall consumer food prices. Remaining oranges coming from California this year will be from the southern part of the state where weather damage was less severe.

Retail prices for fresh oranges will be higher in 1991 because of the California freeze. While this season's Florida orange crop is particularly large and will help fill some of the void in fresh market supplies, it cannot do the whole job. Most of the Florida orange crop is grown for juice and the fruit is not usually considered attractive enough for fresh marketing.

This year, however, a television ad campaign is telling consumers that Florida orange quality is good despite the appearance. Even so, fresh market orange supplies will be well below last year.

As a result, consumers will be buying other fruits, putting upward pressure on fresh fruit prices in general. The CPI for fresh fruit is now expected to rise 4-7 percent in 1991 rather than the 0-3 percent forecast prior to the freeze. While this is a sharp change in the fruit CPI, overall food prices are not much affected.

The CPI for dairy products is expected to average as much as 3 percent below last year. Demand for fluid milk by manufacturers has subsided because stocks of processed dairy products are more normal. Farm milk prices have fallen and retail prices also have started to drop.

High milk prices over the last 2 years reflected reduced production following the 1988 drought and particularly strong demand for processed dairy products.

Meat production is expected to increase in 1991. Poultry output likely will grow 5 percent, but red meat production will increase at a slower 2 percent. This year is expected to be quite different from 1990, when red meat prices rose 9 percent as output slipped for the second consecutive year.

In 1991, with slightly higher production, red meat prices are expected to rise a much slower 1-4 percent. Poultry prices likely will decline from 1990 because of larger supplies.

Fresh vegetable prices probably will average below last year, when first-quarter supplies were cut by a late December 1989 freeze that damaged production in Florida and Texas.

Weather conditions in the winter-vegetable growing areas have been more favorable this year and no major supply disruptions have occurred. A few crops were slightly damaged by the freeze that hit California, but the majority of vegetables at that time of year come from Florida and Mexico, and markets were barely affected. (Ralph Parlett (202) 219-0870] AO

Egg, Poultry, Dairy, and Vegetable Prices To Drop

	1988	1989	1990	Forecast 1991
Consumer Price Indexes				
	Percent			
All food	4.1	5.8	5.8	2 to 5
Food away from home	4.1	4.6	4.7	4 to 6
Food at home	4.2	6.5	6.5	1 to 4
Meat, poultry, and fish	3.5	5.0	7.3	0 to 3
Meats	2.4	4.0	10.1	1 to 4
Beef and veal	5.5	6.4	8.0	1 to 4
Pork	3.0	0.6	14.7	-1 to 2
Other meats	2.6	2.8	9.3	1 to 4
Poultry	7.2	9.9	-0.2	-5 to 0
Fish and seafood	5.8	4.5	2.2	2 to 4
Eggs	2.3	26.6	4.7	-10 to -5
Dairy products	2.4	6.6	9.4	-3 to 1
Fats and oils	4.6	7.2	4.2	4 to 6
Fruits and vegetables	7.6	8.5	8.0	1 to 4
Fresh fruits	8.3	6.6	12.1	4 to 7
Fresh vegetables	6.3	10.7	5.6	-3 to 1
Processed fruits & vegetables	7.9	6.3	6.2	3 to 6
Processed fruits	10.3	3.2	8.7	1 to 3
Processed vegetables	4.8	10.7	2.7	3 to 6
Sugar and sweets	2.7	4.7	4.4	4 to 6
Cereals and bakery products	6.4	8.4	5.7	4 to 6
Nonalcoholic beverages	0.0	3.5	2.0	3 to 6
Other prepared foods	3.7	6.4	4.5	4 to 6

Source of historical data: Bureau of Labor Statistics.
Forecasts by Economic Research Service, USDA.



East Asian Ag Markets Becoming More Complex

The Pacific Rim economies of Japan, South Korea, Taiwan, and Hong Kong are large and growing markets for U.S. agricultural exports. In fiscal 1990, of the top ten U.S. country markets, Japan ranked first, Korea fourth, and Taiwan sixth. The four together have replaced the EC as the top U.S. regional market since 1984. And they now account for almost twice the EC's share of U.S. agricultural exports.

The share of U.S. agricultural exports going to the four Asian countries rose from 20 percent in 1968 to a high of 33 percent in 1990. In fiscal 1991, although U.S. exports to the region are forecast to decrease 2 percent, the share will increase marginally.

The four densely populated markets have had rapid economic growth and low inflation for the past 25 years. However, population and income growth, key determinants of import growth, have recently been slowing. Agricultural import growth, although still strong by world standards, has likewise slowed, especially for bulk commodities.

Although bulk commodities still account for over half of U.S. exports, the Pacific Rim economies appear to be shifting to imports of high-value products relative to bulk commodities. Growth in East Asian livestock product imports relative to feed imports is a key factor in this shift.

Will East Asia's import growth continue to slow in the 1990's? Or will the shift from bulk commodities to high-value products be sufficient to boost import growth above the 1980's rates? U.S. exporters will be closely watching how maturing markets shift their demands for agricultural imports.

Major U.S. competitors in the region include Australia for grains, cotton, and beef; the EC for grains, poultry, and processed products; the Soviet Union for cotton; China for grains, soybeans, and cotton; Canada for grains, oilseeds, and pork; and Brazil and Argentina for soybeans.

Japan Is Buying More High-Value Products

Japan has been the leading single-country market for U.S. agricultural exports since 1963. In fiscal 1990, U.S. exports were \$8.1 billion, down slightly from a peak the year before. In fiscal 1991, exports are expected to remain about the same.

After falling off in fiscal 1985 and 1986 because of depressed commodity prices and lower U.S. shares in key markets, U.S. farm exports to Japan started to take off in fiscal 1987. Lower loan rates under the 1985 farm act provided an important impetus by making some commodities, such as grain and cotton, more competitive. And the yen strengthened significantly against the dollar, making U.S. products cheaper.

U.S. agricultural trade with Japan still relies heavily on grains and soybeans. Since the mid-1980's, however, the U.S. has been expanding exports of high-value and processed products, including beef and citrus. Japan's imports of high-value products rose from 20 percent of its total agricultural imports in 1970 to 45 percent in 1988.

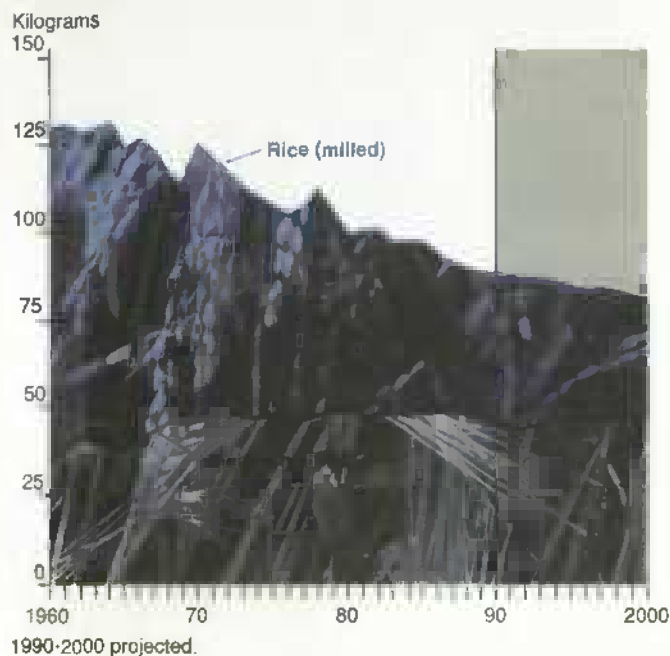
The shift accelerated after 1985 for various reasons, including tariff reductions, deregulation of cigarette imports, the 1988 Beef-Citrus Agreement, a GATT agreement that removed or expanded quotas for some processed agricultural products, and the substantial appreciation of the yen.

The trend toward a greater proportion of high-value imports is likely to continue, but will depend largely on how much more Japan liberalizes its agricultural markets, its rate of economic growth, the value of the yen, and the competitiveness of Japan's farming and food processing concerns. Falling trade barriers should help lower the real retail prices facing consumers, thereby boosting consumption. This assumes that distribution patterns will allow price competition.

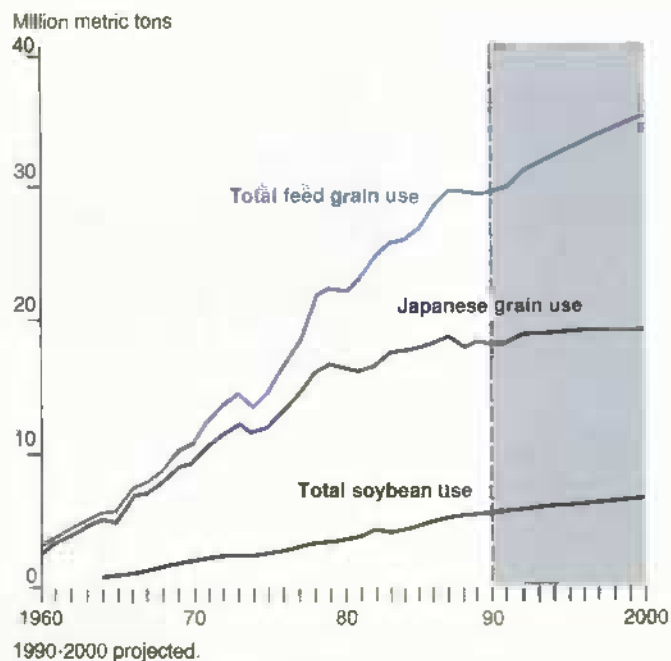
While Japan's economic growth has gone on so long that markets for many products have matured and are now growing slowly, consumption of livestock products is an exception. Meat, and to a lesser extent, dairy consumption is expected to continue rising rapidly through the 1990's. Gains in livestock product consumption would reflect lower real prices along with continued advances in incomes and appetites for western foods. The growth in meat, dairy, and egg product imports will cause

Special Articles

Per Capita Rice Consumption Is Declining In East Asia



East Asian Feed Use Continues To Expand, But at a Slower Rate



Japan's total agricultural imports to rise steadily through the 1990's.

The growth in meat and dairy imports is pressuring Japan's domestic industries, and slowing local output growth. And import competition is forcing domestic producers to use feed

more efficiently. As a result, feed grain and oilseed meal consumption growth probably will slow.

Japan's rice economy is ripe for structural change. Farm size remains very small, about 2.5 acres on average. Needed labor is disappearing because wages are higher in nonfarming sectors. And returns to labor on the smaller farms are shrinking as the government cuts the real producer price of rice.

Even if Japan does not liberalize rice trade, the days of myriad small rice farms probably are numbered. Now, rice imports are almost entirely banned.

Future land use patterns will differ as rice farms consolidate. The effects on trade will depend in part on what crops are planted as the structural shift occurs, but production of wheat, soybeans, and barley likely would drop. Still, lower cost rice would be grown on larger farms—Japan has large areas well-suited to rice farming. Major questions remain about how to consolidate and whether costs could ever drop enough to make rice farming profitable without high trade barriers.

Korea To Buy More Convenience Foods

For the past 15 years, Korean agricultural imports have consistently driven up world agricultural trade. Strong economic growth there has fueled increased consumption of high-value products. The U.S. has been the leading supplier. U.S. agricultural exports soared from about \$300 million in 1970 to \$2 billion in 1980, fluctuated between \$1 billion and \$2 billion through most of the 1980's, and reached \$2.7 billion in fiscal 1990.

Consumption of livestock products has grown the most, and Korea has sought to protect its domestic livestock industries with strong trade barriers. During 1975-85 imports of corn and soybeans boomed, chiefly for feed. The U.S. was the main supplier.

Since 1985, Korean imports have diversified, even though livestock product consumption and animal feeding have continued to expand rapidly. Imported feed wheat, rapeseed meal, and soybean meal have taken large shares of the feed grain and soybean markets in some years. Greater diversity in feed imports has benefited China, the EC, Brazil, and several other countries, and helps to explain the drop in the U.S. share of Korea's agricultural import market in the mid-1980's.

Korea's pork, poultry, and dairy industries evolved throughout the 1980's toward larger, more modern enterprises. Continued growth is expected in the 1990's. One probable outcome is greater feeding efficiency.

Beef cattle supplies, on the other hand, have not grown quickly or smoothly enough to meet fast-rising demand at reasonable prices. Beef imports were allowed during 1978-83, and again

beginning in 1988. For periods in the mid-1980's, only beef for airline catering was allowed.

Prospects are good that Korea will be a large, permanent importer of beef. The U.S. supplied 39 percent of Korea's beef imports in 1990. Following a GATT ruling, Korea has agreed to dismantle its beef import quotas or bring them into conformity with GATT rules by 1997, and imports likely will grow substantially during the 1990's.

Food grain imports were stable over most of the 1980's. Food use of grains did not rise with income gains, and population growth has slowed. Barring disastrous weather or a major loosening of its trade barriers, Korea is not expected to again become a rice importer. Per capita food consumption of wheat has been flat since 1980. Wheat imports for food and industrial uses are expected to remain steady through the 1990's.

Korea is a major importer of cotton and cattle hides for its textile and footwear industries, but these imports are not expected to grow this decade. Korea's labor costs rose sharply in the late 1980's, and trade barriers abroad have limited the growth of Korean exports.

A massive cultural change has accompanied Korea's rapid economic growth. Society has become heavily urbanized, with more meals eaten away from home and more convenience foods used in the home.

Experimentation with and acceptance of western-style fast foods has been widespread. Such changes are expected to proceed through the 1990's, and will stimulate high-value imports of raw materials for food processing as well as finished products. However, Korea's future import patterns depend heavily on the outcome of disputes about its trade barriers.

Taiwan Is a Hot Prospect

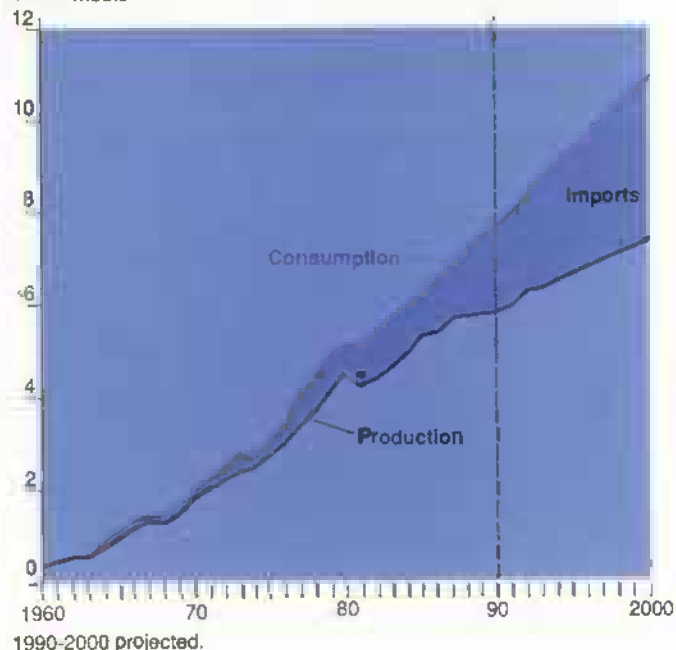
Taiwan was the fastest growing market in the Pacific Rim for U.S. agricultural exports during the past two decades. In fiscal 1990, U.S. farm exports to Taiwan reached \$1.8 billion. With rising incomes, a growing preference for western-style foods, a dwindling agricultural sector, and some trade liberalization likely, Taiwan's demand for agricultural imports will continue to grow.

As the largest supplier of Taiwan's farm imports, the U.S. is in a good position to increase its agricultural exports, especially of high-value products.

Because of limited resources and climate, Taiwan has depended almost totally on imports of inputs for its livestock, flour milling, and export-oriented textile and leather goods industries. Fast growth in these industries has spurred the rapid growth of U.S. agricultural exports to Taiwan. Imports of high-value products also grew significantly in the 1980's.

East Asian Meat Imports To Rise

Million metric tons



Taiwan has high tariffs, particularly on high-value products, and bans on imports of rice, chicken meat, animal offals, and peanuts. Yet a number of characteristics offer good growth prospects for U.S. exporters. Per capita income is already on a par with the low- to middle-income developed countries. Taiwan's economy is forecast to continue growing in the 1990's, although perhaps at a slower pace.

Taiwan's foreign exchange reserves, which have fluctuated between the world's first and third largest since the mid-1980's, will remain large. And Taiwan's dollar is forecast to remain strong, which will help keep down import prices.

Bulk commodities will continue to dominate U.S. agricultural exports to Taiwan in the 1990's, but growth likely will slow. High costs and a strong currency will cause the textile and leather goods industries to decline as the electronics and information industries accelerate. Livestock production will continue to expand but at a slower rate, in part because of pollution concerns.

With more than 20 million people living mostly in urban areas and with high incomes, Taiwan is an ideal market for U.S. high-value exports. In addition, under the Integrated Agricultural Adjustment Plan, only staples such as rice and uncompetitive, but politically sensitive, products such as peanuts would be protected from foreign competition. The Plan, when implemented, should facilitate tearing down Taiwan's tariff and non-tariff barriers—particularly for intermediate and high-value products.

Since applying for GATT membership last year, Taiwan has prepared to bring agricultural support and trade policies in line with GATT requirements. However, significant agricultural

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liberalization will await the disposition of the application, which is complicated by political considerations.

In the interim, Taiwan probably will make modest reforms. But Taiwan's agriculture cannot provide at competitive prices the kinds, qualities, and quantities of farm products demanded by an increasingly prosperous and sophisticated population. Agricultural imports will continue to grow. But trade liberalization would speed the trend.

Hong Kong's Lease Raises Questions

Although only a small colony of 6 million people, Hong Kong provides a large outlet for U.S. farm products, ranking among the top 15 markets worldwide. U.S. agricultural exports to Hong Kong rose substantially over the last two decades, reaching a record \$685 million in fiscal 1990. Hong Kong has been an especially good market for U.S. fresh fruits and vegetables, poultry meat and eggs, mink skins, ginseng, cotton, tobacco, and cigarettes.

Some of Hong Kong's bulk imports, such as tobacco and cotton, are used to support production for the local and export markets. As a major trade center, Hong Kong also imports various agricultural products for reexport to other mostly Asian countries, and this trade has grown in recent years.

With high per capita incomes, Hong Kong's population enjoys a wide variety of traditional and western foods. As incomes and the desire for more convenience foods grow, consumption and imports of high-value and processed products are likely to expand. As the colony practices essentially free trade, price

and quality are key factors in determining competitiveness in this market.

Hong Kong's political and economic future is uncertain. The British colony will be remanded to the People's Republic of China in 1997. But Hong Kong still will have to rely on imports for most of its food and raw materials. China traditionally has been the largest supplier of agricultural products to Hong Kong, but whether this dependence increases will hinge largely on China's ability to meet the needs of its own huge market.

Certain economic and policy developments likely will influence the colony's major agricultural imports, including pork, poultry meat, tobacco, and cotton. Because of strict pollution control measures, Hong Kong's own small pork and poultry industries probably will continue to contract, necessitating greater imports of live animals or fresh and frozen meat.

A vigorous government anti-smoking policy stands to depress cigarette consumption in the colony, which would cut U.S. tobacco and cigarette exports. Hong Kong's textile industry, a large user of imported cotton, is facing higher land and labor costs. And the industry faces less beneficial world trade rules regarding textiles, depending on the results of the GATT talks.

Looking to the 1990's And Beyond...

The 1990's promise continued strong increases in overall East Asian agricultural trade. However, the shifts among commodities evident in the 1980's will intensify, and overall growth probably will be slower unless some substantial trade barriers are removed.

Three important categories of trade will see little or no growth. Among them are cotton and hide imports. Given the region's high labor costs, some of the economies will have trouble maintaining current imports.

Another no-growth area is grains for direct food use. Wheat imports have flagged throughout the region in the last decade, and consumption per person has not grown since the late 1960's. With population growth slowing, wheat imports are not likely to increase.

Rice consumption per person has dropped steadily through most of the region, but is still substantial and very expensive by world standards. However, except for Hong Kong, stiff trade barriers bar rice imports.

The third low-growth area is Japan's feedstuff imports. Japan's meat and dairy consumption still is growing strongly, but the growth is being met mostly by imports rather than by domestic production.

**East Asia's Agricultural Import
Values Slowed the Most for Bulk Commodities 1/**

Country	1970-79	1980-88
Percent		
Japan		
Bulk 2/	6.0	-1.9
High value 3/	12.9	5.5
Korea		
Bulk	11.4	0.9
High value	22.8	11.2
Taiwan		
Bulk	11.9	1.5
High value	21.1	4.0
Hong Kong		
Bulk	7.0	2.1
High value	7.9	3.4

1/ Inflation-adjusted annual average growth rates. 2/ Includes grains, oilseeds, cotton, wool, tobacco, sugar, hides and skins, raw sugar, live animals, and natural rubber. 3/ Includes meats, other semi-processed and highly processed foods, some unprocessed items such as fruits and vegetables, and cigarettes.

Source: Derived from UN trade data.

Increased beef imports are the main reason for the projected surge in meat trade. Steadily rising consumption will outpace production, resulting in growing imports. The projections assume significant consumer price declines in Japan and considerably improved import access in Korea and Taiwan.

Aside from allowing limited beef imports, the livestock industries in Korea and Taiwan are still almost completely protected from trade. If trade barriers largely disappeared, Korea's and Taiwan's meat imports would grow faster while their feed import growth would slow.

Assuming a continued strong performance by the region's four economies, meat imports would nearly double by the end of the decade. Grain imports would rise by about 7 million tons, below the roughly 10 million tons added in the 1980's, and much less than the 16 million tons added in the 1970's. Soybean imports could rise by 1.9 million tons, almost as much as in the 1980's. The increased value of meat imports would outweigh the downward shift in grain import growth.

During the 1990's, the overall value of staple commodities imported, including meat, should rise. But growth could slow considerably after 2000, as livestock product consumption levels off. Nonetheless, a large variety of high-value agricultural products besides meats should find favorable markets in the 1990's and beyond because of income growth, cultural change, and the gradual lowering of trade barriers.

High-value items will increasingly dominate the trade in farm goods to East Asia. Maintaining or increasing U.S. market share in the region will depend on the ability of U.S. exporters to tap into these expanding markets. *[Lois Caplan, John Dyck, Carol Goodloe, and Sophia Huang (202) 219-0610] AO*



Soviets Retreat From Economic Reform

Progress toward substantial economic reform of the ailing Soviet economy has stalled. Last September, the Supreme Soviet considered a radical, market-oriented reform package. The package called for establishing the basics of a market economy, including market-determined prices, regulated capital markets, and increased private property rights within 2 years.

However, the Supreme Soviet failed to adopt the proposal for two crucial reasons. First, the program had numerous inconsistencies and understated the difficulties associated with reform. Second, strong broad-based resistance to radical economic changes existed outside the top levels of government.

The fate of Soviet agricultural reform is tied to the failed general reform efforts. Successful farm-sector reform is crucial to any economic reform in the USSR, in part because the lion's share of disposable consumer income (70 percent) is spent on food and fiber products. Agriculture and the food industry account for one-third of Soviet employment and investment, well above the U.S. proportions.

Moreover, the recently proposed retail price hikes and increases in incomes represent a nonmarket strategy to overcome the simultaneous problems of retail food shortages and budget deficits. If implemented, the reform would cut food demand and modestly reduce the demand for agricultural imports. But the reforms will have only a small impact on the budget deficit and not increase domestic agricultural production.



Special Articles

Soviet Economy Is Sliding

Massive subsidies, equivalent to 10 percent of the USSR's annual national output, are channeled to the agricultural sector. The subsidies arose from holding retail prices constant despite steady growth in production costs and prices paid to farms. Their rapid growth has played a major role in Gorbachev's inability to control monetary and fiscal policy.

It appears that Soviet economic reform had made very little progress at its apex. The USSR was nowhere close to making a successful transition to a market economy.

The environment for economic reform has deteriorated considerably since last fall's deliberations in the Supreme Soviet. The last 18 months have witnessed a continuous slide in the Soviet economy. GNP is declining at an accelerating rate, while inflationary pressures continue to build. Crisis management, with heavy reliance on administrative control, increasingly characterizes the government's approach to economic problems.

Most key economic advisors associated with market-oriented reforms have resigned from Gorbachev's USSR government and Boris Yeltsin's Russian Republic government. This underscores the retreat from reform.

With market reformers in retreat and prospects fading for market-oriented price liberalization, a reassertion of central control over economic activity appears inevitable. Such a move would seriously threaten any hard-won farm, enterprise, or republic autonomy.

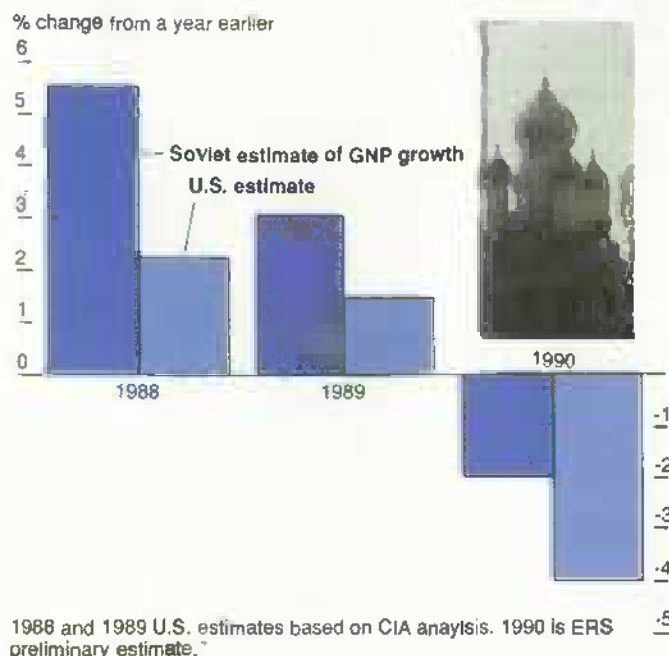
While the government has recently proposed a one-time hike in retail food prices of 200-300 percent, markets still would not determine prices. Under the proposal, bread and meat prices in state stores are to increase 300 percent. Butter and vegetable oil prices would rise 200 percent, while milk prices would go up 130 percent.

Even though the higher prices would approximate current production costs, they likely would be frozen at their new levels. So, retail food subsidies and excess demand would resume their growth. And the reform calls for higher wages to be paid by the state, offsetting much of the potential budget savings.

According to the proposal, about 30 percent of consumer prices are to be set by negotiations between wholesalers and retailers, or be free to move within a given band. Prices of fruits, vegetables, and potatoes have been set this way for years. While this could represent a small step toward liberalized pricing, it falls far short of what was proposed last fall.

Soviet agricultural trade will remain strongly influenced by production, domestic price and monetary policies, and hard-currency availability. Because of current economic policies, there is little reason to anticipate much improvement in agricultural production. However, the recently proposed increases in retail food prices would cut the amount demanded.

The Soviet Economy Contracts



If the price reforms are implemented, Soviet agricultural imports would decline modestly. However, if the USSR's general economic situation continues to deteriorate, forecasts of Soviet imports based on the nation's domestic supply and use trends are likely to be too high.

Vested Interests Block Ag Reform

President Gorbachev is linked in the minds of many in the West with agricultural reform because of his call for the revival of private peasant agriculture and traditional ties to the land. But resistance to agricultural reforms arose for a number of reasons, including:

- the strength of entrenched farm conservatives,
- the monopolistic organization of the preexisting administrative-command economy,
- a political reluctance to deal with retail price subsidies, and
- deficiencies in the Soviet banking and capital markets.

Except in the Baltics and other small republics, conservatives dominate the agricultural policy debate. The Agriculture and Food Committee of the Supreme Soviet, which is responsible for drafting agriculture policy, is heavily influenced by the "agrarian lobby." State and collective farm managers, backed by conservative government and industry officials, make up the lobby.

The lobby argues that state and collective farms are not responsible for the dismal record in agriculture because their hands have been bound by the administrative-command system.

The lobby advocates greater autonomy for existing farms without restructuring farm ownership or management. It also advocates increased investment. And the lobby has made price parity between agriculture and industry a sacred element in the economic reform debate. That is, as input prices rise to more truly reflect costs, state and collective farms should be fully compensated by procurement price increases.

This lobby prevailed last fall, when prices paid to farms increased 32 percent, more than enough to compensate for planned increases in input and credit costs. In addition, a special fund of 17 billion rubles was created to finance investment for financially weak state and collective farms. This represents one-third of all current farm investment.

The slow rate of reform shows how successful the lobby has been. Despite the extensive discussion about private peasant farms, neither the USSR Supreme Soviet nor the large republics considered policies calling for wholesale restructuring of state and collective farms. Instead, the government continues to reduce the pressure on existing farms to restructure.

Last summer the government announced that all 60 billion rubles in long-term debt of state and collective farms would be written off. And the Russian Republic is writing off an additional 23 billion rubles in short-term debt.

The socio-political environment for privatization remains unfavorable in the Russian Republic, the Ukraine, and Byelorussia, despite the popular western view that these republics are better prepared for radical reform. Despite 2 years of Gorbachev's

favorable talk, there are barely 1,000 private farms in the three republics, representing an infinitesimal share (0.006 percent) of agricultural land.

According to recent opinion surveys, farm workers express little interest in establishing private farms. Further, the Russian Republic's agricultural program, announced in December, gives a very small role to markets.

Structural Barriers Are Daunting

Even if the conservatives can be won over or overcome, the non-competitive structure of the existing economy will obstruct reform. Further, reducing administrative control will have little impact on farm performance, as long as marketing and input supplies remain monopolized. State and collective farms continue to depend on the state supply network to provide fertilizer, machinery, seeds, and other inputs and services. Similarly, the state procurement network remains far and away the predominant alternative for marketing.

This situation is not likely to improve soon. Current government policy specifically singles out commodities such as meat, sugar, bread, and vegetable oil for continued state marketing. At least through 1992, fully 60 to 70 percent of farm sales will continue to be marketed through the state-controlled system.

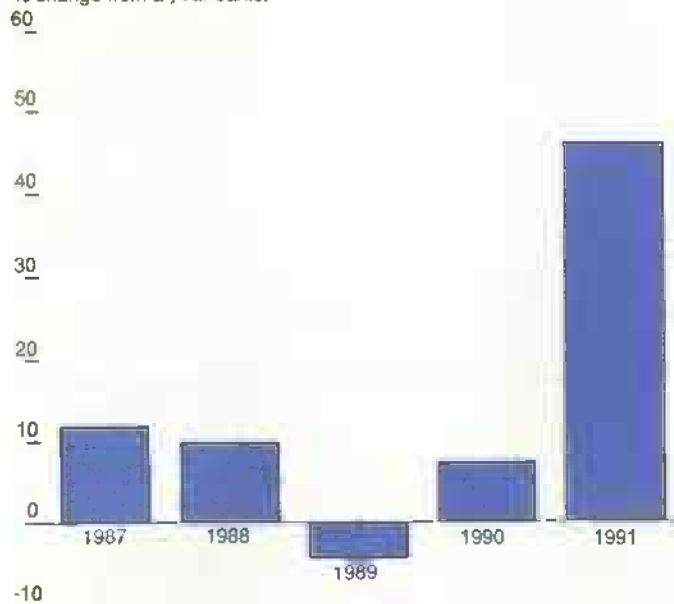
Production of farm machinery and supplies is dominated by monopolistic state-owned producers geared to the needs of large farms that are run by the state. Even so, input suppliers are notoriously unresponsive to client needs and have little incentive to change.

Allowing foreign competition also is not a likely solution given the USSR's current trade deficit and inconvertible ruble. Similarly, foreign direct investment in restructuring agricultural input industries remains unattractive because of currency restrictions, political instability, and bureaucratic obstacles.

Given the barriers to efficiency gains on the supply side, budget pressures to take strong action on the demand side by boosting consumer prices are reaching the breaking point. Without retail price increases, claims the Ministry of Finance, the higher farm procurement price increases introduced last fall would raise 1991 net payments from the state budget by 65 billion rubles, and nearly double the current government budget deficit. While the recently proposed retail price reform also would lift income subsidies, some budget savings would be realized.

Subsidies to the Soviet Agro-Industrial Complex Surge

% change from a year earlier



Special Articles

State To Remain Source of Credit

A particularly constraining part of the economy is the financial sector. The roughly 60 billion rubles in long-term agricultural debt being written off carries a nominal interest rate of 0.75 percent. Short-term rates to agriculture have ranged as high as 2 percent.

The interest rates were established to cover operating costs of state banks, not their cost of funds. In such an environment, there is excess demand for credit. So capital has been allocated by decree rather than by the market.

The commercialization of the financial sector is not being designed to ensure sufficient funds for restructuring and privatization or to eliminate the excess demand for credit. Despite a nominal shift of existing state sectoral banks to a commercial basis, the government will remain the predominant source of investment capital.

The Agro-Industrial Bank, formerly the sole provider of credit to agriculture, has been transformed into a joint-stock venture. However, 60 percent of its capital comes from the Ministry of Finance. And the bank's current 217-billion-ruble loan portfolio exceeds its statutory lending authority by 36 percent. The lending authority is based on fixed authorized capital of 8 billion rubles and the standard that capital should equal 5 percent of loans.

Because much of the current portfolio is in default and will be written off (by Soviet accounting this will not affect bank capital), some additional lending will be allowed. But state and collective farms are first in line for the new credit. Despite some claims to the contrary, it appears that the Agro-Industrial Bank will have few resources to finance privatization or restructuring.

Commercialization of banking also is unlikely to bring credit markets into balance. Starting in 1991, interest rates rose to as much as 11 percent for farm loans, well short of current inflation of 15-20 percent a year. Banking officials dismiss the suggestion that higher rates, positive after accounting for inflation, will be necessary. The officials say that high interest rates are unaffordable and inflationary.

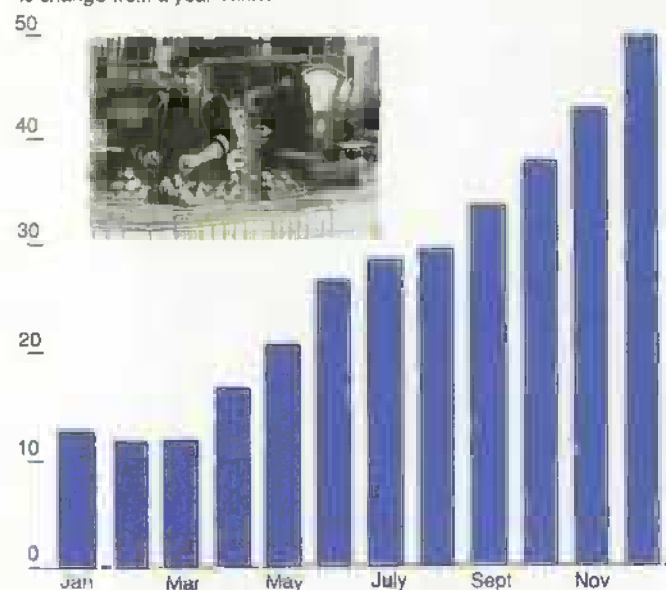
Contraction Dims Reform Prospects

Agriculture is being affected in a broader sense by the sharpening economic contraction and accelerating inflation. Soviet output has shrunk throughout 1990 and into 1991. Preliminary data show a 2-percent decline in GNP for 1990, with a 4-percent drop in the last quarter.

These statistics are not fully corrected for inflation. Some western analysts believe that Soviet GNP growth in 1989 was actu-

Prices at Soviet Farmers' Markets Rose Substantially In 1990

% change from a year earlier



Price index for farm markets.

ally zero, and that the decline for all of 1990 was about 5 percent.

Although economic activity stagnated and then declined, the money supply has been increasing. While no direct data are available on the Soviet money supply, nominal (money) income increased nearly 20 percent last year.

Though the state continues to set most retail prices, consumer prices at farmers' markets are largely free to respond to supply and demand. These prices increased 50 percent from December 1989 to December 1990. This inflation rate compares with the official estimate for 1990 of 5-7 percent.

In January, the government moved to cut the money supply by repudiating 50- and 100-ruble notes. The official reason for the action was to control black marketeers who had profited from buying goods from state stores at subsidized prices and then reselling them at market prices.

Citizens were given less than a week to exchange up to 1 month's salary in the larger notes for smaller bills. The reform may well serve to further erode confidence in the ruble. Moreover, such currency reforms alone cannot stop inflation. Because the program does not significantly cut the large government subsidies, the government's need for cash will continue to grow rapidly.

As the number of rubles in circulation continues to grow excessively, farms and enterprises are increasingly reluctant to sell commodities for rubles at low, state-set prices. This has sharply dampened inter-republic trade. Republics and regions have begun to hoard agricultural and other commodities for

their own use or for barter. This has been a major factor behind food shortages in regions such as Moscow, Leningrad, and the Urals that either do not produce their own food or do not produce enough.

Freeing up prices would allow buyers and sellers to reach mutually agreeable terms in rubles, boosting trade flows throughout the system. But chances for market-determined prices are anything but bright.

Many of the resigning government economists complained about the unrestrained populism of government leaders and policymakers, who are reluctant to support uncompensated retail price increases for food, or price liberalization in general. Instead, greater spending on social programs has been promised, with increases possible in the budget deficit and in inflation. [Ed Cook (202) 219-0621 and Robert Collender (202) 219-0892] **AO**

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Statistical Indicators

Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1989		1990			1991			
	III	Annual	III	IV	Annual	IF	II F	III F	Annual F
Prices received by farmers (1977=100)	145	147	150	145	150	144	142	143	—
Livestock & products	159	160	173	167	171	164	164	165	—
Crops	130	134	128	122	128	123	120	120	—
Prices paid by farmers. (1977=100)									
Production items	166	165	170	174	171	173	—	—	—
Commodities & services, interest, taxes, & wages	179	178	184	187	184	187	—	—	—
Cash receipts (\$ bil.) 1/	164	159	178	177	168	164	175	175	170-175
Livestock (\$ bil.)	84	84	90	90	90	88	88	91	89-93
Crops (\$ bil.)	80	75	88	75	78	75	87	84	78-82
Market basket (1982-84=100)									
Retail cost	125	125	134	135	134	—	—	—	—
Farm value	107	107	114	110	114	—	—	—	—
Spread	135	134	145	149	144	—	—	—	—
Farm value/retail cost (%)	30	30	30	28	30	—	—	—	—
Retail prices (1982-84=100)									
Food	127	125	133	134	132	135	—	—	135-139
At home	128	124	132	134	132	135	—	—	135-137
Away from home	130	127	134	135	133	137	—	—	138-141
Agricultural exports (\$ bil.) 2/	8.8	39.7	8.4	9.9	40.2	11.3	8.8	8.4	38.5
Agricultural imports (\$ bil.) 2/	5.1	21.5	5.3	5.4	22.5	5.8	5.5	5.3	22.0
Commercial production									
Red meat (mil. lb.)	9,875	39,418	9,618	9,847	38,588	9,599	9,859	9,935	39,252
Poultry (mil. lb.)	5,770	22,039	5,982	6,157	23,655	5,915	6,265	6,315	24,820
Eggs (mil. doz.)	1,392	5,598	1,413	1,444	5,859	1,415	1,430	1,425	5,715
Milk (bil. lb.)	35.1	144.3	36.7	36.3	148.6	37.8	39.2	38.9	150.3
Consumption, per capita									
Red meat and poultry (lb.)	55.3	220.6	55.3	57.7	220.6	54.5	55.9	57.1	226.5
Corn beginning stocks (mil. bu.) 3/	2,843.2	4,250.1	2,843.2	1,344.5	7,082.1	—	—	—	6,940.0
Corn use (mil. bu.) 3/	1,499.0	7,260.2	1,498.9	—	8,115.0	—	—	—	8,045
Prices 4/									
Choice steers—Omaha (\$/cwt)	70.09	72.52	75.48	79.44	77.40	76-80	76-82	74-80	75-81
Barrows & gilts—7 mths. (\$/cwt)	46.07	44.03	57.67	51.67	54.45	50-54	51-57	53-58	50-58
Broilers—12-city (cts./lb.)	59.7	59.0	57.2	48.8	54.8	50-54	52-58	53-58	51-57
Eggs—NY gr. A large (cts./doz.)	69.2	81.9	77.8	88.5	82.2	82-86	69-75	71-77	73-79
Milk—all at plant (\$/cwt)	13.27	13.57	14.20	12.63	13.77	11.20-12.20	10.50-11.10	10.85-11.85	10.95-11.95
Wheat—KC HRW ordinary (\$/bu.)	4.34	4.36	2.94	2.70	—	—	—	—	—
Corn—Chicago (\$/bu.)	2.36	2.55	2.53	2.30	—	—	—	—	—
Soybeans—Chicago (\$/bu.)	5.70	6.70	6.10	5.86	—	—	—	—	—
Cotton—Avg. spot mkt. (cts./lb.)	67.1	63.7	75.6	69.9	—	—	—	—	—
	1983	1984	1985	1986	1987	1988	1989	1990	1991 F
Gross cash income (\$ bil.)	150.6	155.5	157.2	152.0	164.3	170.4	177.5	184	185-190
Gross cash expenses (\$ bil.)	111.0	119.0	109.3	105.2	108.2	112.3	122.8	125	127-133
Net cash income (\$ bil.)	39.5	36.6	47.9	46.7	56.1	58.1	54.6	59	55-60
Net farm income (\$ bil.)	15.3	28.3	31.0	31.0	41.3	41.8	46.7	49	44-49
Farm real estate values 5/									
Nominal (\$ per acre)	788	801	713	640	599	632	667	693	714-728
Real (1977 \$)	472	459	395	346	317	322	325	322	315-321

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages. 5/ 1990-91 values as of January 1. 1986-89 values as of February 1. 1982-85 values as of April 1. F = forecast. — = not available.

U.S. and Foreign Economic Data

Table 2.—U.S. Gross National Product & Related Data

	Annual			1989	1990			
	1988	1989	1990 P	IV	I	II	III	IV P
\$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	4,873.7	5,200.8	5,483.0	5,289.3	5,375.4	5,443.3	5,514.6	5,518.9
Personal consumption expenditures	3,238.2	3,450.1	3,658.1	3,518.5	3,588.1	3,622.7	3,693.4	3,728.1
Durable goods	457.5	474.6	481.6	471.2	492.1	478.4	482.3	473.5
Nondurable goods	1,080.0	1,130.0	1,194.2	1,148.8	1,174.7	1,179.0	1,205.0	1,218.3
Clothing & shoes	191.1	204.6	213.3	208.7	212.9	212.6	215.8	212.0
Food & beverages	562.6	595.3	624.9	602.2	616.4	623.3	629.8	629.9
Services	1,720.7	1,845.5	1,982.3	1,898.5	1,921.3	1,965.3	2,006.2	2,036.3
Gross private domestic investment	747.1	771.2	745.0	762.7	747.2	759.0	789.7	714.0
Fixed investment	720.8	742.9	747.2	737.7	758.9	745.6	750.7	733.6
Change in business inventories	26.2	28.3	-2.2	25.0	-11.8	13.4	9.0	-19.5
Net exports of goods & services	-74.1	-46.1	-38.0	-35.3	-30.0	-24.9	-41.3	-55.9
Government purchases of goods & services	962.5	1,025.6	1,098.0	1,043.3	1,070.1	1,086.4	1,102.8	1,132.7
Gross national product	4,016.9	4,117.7	4,155.8	4,133.2	4,150.6	4,155.1	4,170.0	4,147.6
Personal consumption expenditures	2,606.5	2,656.8	2,682.2	2,669.9	2,677.3	2,678.8	2,696.8	2,675.6
Durable goods	418.2	428.0	428.4	423.1	437.6	428.8	429.5	419.9
Nondurable goods	909.4	919.9	911.5	923.0	915.6	911.2	916.4	902.8
Clothing & shoes	165.0	172.7	172.7	175.1	174.2	171.3	174.4	171.0
Food & beverages	462.2	482.9	457.5	460.3	457.4	459.3	459.4	454.0
Services	1,278.9	1,309.0	1,342.2	1,323.8	1,324.2	1,340.8	1,350.8	1,353.1
Gross private domestic investment	705.7	716.9	690.3	709.1	700.7	700.7	697.0	662.8
Fixed investment	682.1	693.1	691.4	690.2	702.9	691.2	692.3	679.1
Change in business inventories	23.6	23.8	-1.1	18.9	-2.2	9.5	4.7	-16.3
Net exports of goods & services	-75.9	-64.1	-37.5	-47.9	-35.4	-44.6	-46.5	-23.6
Government purchases of goods & services	780.5	798.1	820.8	802.2	807.9	820.2	822.7	832.5
GNP implicit price deflator (% change)	3.3	4.1	4.1	3.8	4.8	4.7	3.7	2.8
Disposable personal income (\$ bil.)	3,479.2	3,725.5	3,945.8	3,799.6	3,887.7	3,925.7	3,999.1	4,000.9
Disposable per. income (1982 \$ bil.)	2,800.5	2,869.0	2,893.3	2,883.2	2,900.9	2,902.8	2,898.0	2,871.6
Per capita disposable per. income (\$)	14,123	14,973	15,695	15,210	15,527	15,639	15,765	15,847
Per capita dis. per. income (1982 \$)	11,368	11,531	11,508	11,541	11,588	11,564	11,511	11,374
U.S. population, total, incl. military abroad (mil.)	246.4	248.8	251.4	249.8	250.4	251.0	251.8	252.5
Civilian population (mil.)	244.1	246.6	249.2	247.6	248.2	248.8	249.6	250.0
	Annual			1989	1990			
	1988	1989	1990 P	Dec	Sept	Oct	Nov	Dec
Monthly data seasonally adjusted								
Industrial production (1987=100)	105.4	108.1	109.1	108.6	110.6	109.8	107.8	107.1
Leading economic indicators (1982=100)	142.7	144.9	144.0	145.3	143.3	141.6	140.0	140.1
Civilian employment (mil. persons)	115.0	117.3	117.9	118.0	117.9	117.7	117.4	117.6
Civilian unemployment rate (%)	5.4	5.2	5.4	5.3	5.7	5.7	5.9	6.1
Personal income (\$ bil. annual rate)	4,070.8	4,384.3	4,645.6	4,496.7	4,697.8	4,696.1	4,713.7	4,747.3
Money stock—M2 (daily avg.) (\$ bil.) 1/	3,072.4	3,221.6	3,323.1	3,221.6	3,317.1	3,318.8	3,317.6	3,323.1
Three-month Treasury bill rate (%)	6.69	8.12	7.51	7.64	7.38	7.19	7.07	6.81
AAA corporate bond yield (Moody's) (%)	9.71	9.26	9.32	8.86	9.56	9.53	9.30	9.05
Housing starts (1,000) 2/	1,488	1,376	1,193	1,273	1,106	1,026	1,127	987
Auto sales at retail, total (mil.)	10.6	9.9	9.5	8.9	10.1	9.3	8.6	8.9
Business inventory/sales ratio	1.49	1.50	—	1.51	1.48	1.48	1.50	—
Sales of all retail stores (\$ bil.)	137.5	144.5	150.0	145.8	151.6	151.8	151.6	151.1
Nondurable goods stores (\$ bil.)	85.2	90.7	96.0	93.1	97.8	97.7	98.2	98.0
Food stores (\$ bil.)	27.2	29.1	30.6	29.9	31.2	30.9	31.0	31.1
Eating & drinking places (\$ bil.)	13.8	14.5	15.1	14.5	15.2	15.2	15.2	15.2
Apparel & accessory stores (\$ bil.)	7.1	7.6	7.9	7.7	7.9	7.8	7.8	7.6
	Annual			1990				1991
	1988	1989	1990	Jan	Oct	Nov	Dec	Jan
Foreign exchange value of the dollar								
Japanese yen per U.S. dollar	128.2	137.9	145.0	145.0	129.6	128.9	133.8	133.6
German mark per U.S. dollar	1.757	1.874	1.615	1.892	1.520	1.480	1.500	1.510

1/ Annual data as of December of the year listed. 2/ Private, including farm. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 3.—Foreign Economic Growth, Inflation, & Export Earnings

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Average 1980-89
Annual percent change												
World, less U.S.												
Real GDP	1.1	2.0	4.3	3.8	2.7	3.6	4.3	3.4	1.8	1.8	3.4	3.0
Consumer prices	13.1	11.8	12.5	13.0	9.1	11.4	17.7	32.1	79.7	17.4	10.5	15.1
Merch. exports	-7.9	-1.6	5.4	1.8	10.9	18.9	12.7	7.4	12.2	14.4	7.1	8.6
Developed less U.S.												
Real GDP	1.0	2.2	3.9	3.5	2.7	3.5	4.4	4.0	3.7	2.4	3.3	2.9
Consumer prices	8.2	5.8	4.9	4.5	2.7	2.6	2.9	4.3	4.9	5.3	4.6	5.7
Merch. exports	-4.4	-0.5	6.3	4.6	19.5	17.7	12.3	6.0	14.5	13.9	8.3	7.5
Developing												
Real GNP	1.9	1.3	4.5	4.5	2.8	4.1	4.2	3.4	1.8	3.7	5.9	3.4
Consumer prices	25.3	32.7	38.2	39.8	27.0	35.5	57.0	78.0	276.8	47.3	22.5	39.0
Merch. exports	-13.3	-3.3	3.8	-3.2	-6.1	22.0	13.6	10.6	7.6	18.3	5.7	4.9
Asia, incl. China												
Real GDP	5.7	8.0	7.5	7.3	5.8	6.9	8.6	5.3	5.2	5.6	6.1	6.7
Consumer prices	6.4	6.6	6.1	6.0	5.6	7.4	11.8	10.1	7.2	9.6	9.3	8.2
Merch. exports	-0.5	4.6	14.6	-0.9	8.8	30.1	23.1	11.5	10.4	14.8	10.2	12.6
Latin America												
Real GDP	-1.5	-2.7	3.3	3.3	3.8	3.4	0.7	1.2	-1.9	2.1	3.8	1.7
Consumer prices	67.1	108.7	133.5	145.1	82.1	116.1	218.0	345.1	927.0	134.0	50.3	133.1
Merch. exports	-10.6	-0.2	6.3	-5.5	-17.9	13.7	13.9	12.3	6.4	12.4	3.3	4.6
Africa												
Real GDP	-1.7	-0.6	-0.6	3.4	-0.9	0.6	2.3	2.6	2.7	3.0	3.6	0.4
Consumer prices	13.1	18.0	20.6	13.2	12.5	13.1	19.2	24.9	18.3	16.4	15.5	17.2
Merch. exports	-27.9	15.2	-1.0	-2.5	-17.4	14.7	-4.7	15.2	27.5	15.1	-5.7	1.2
Middle East												
Real GDP	2.9	-1.6	2.9	2.3	2.0	1.5	1.4	3.9	-4.9	0.5	12.5	2.1
Consumer prices	12.9	11.9	14.3	17.1	14.9	19.2	19.4	14.5	17.4	17.8	16.1	15.8
Merch. exports	-21.1	-22.2	-10.5	-6.7	-19.6	24.2	1.6	24.1	15.4	35.1	2.6	-1.2
Eastern Europe, incl. USSR												
Real GDP	2.0	3.0	1.8	1.8	3.0	1.4	4.2	1.0	-4.7	-4.5	-2.3	2.1
Consumer prices	12.8	5.4	4.2	6.0	7.4	9.1	15.7	68.1	77.5	19.4	16.2	15.0
Merch. exports	1.3	3.7	1.8	0.2	8.2	5.1	3.0	0.1	-1.5	9.1	2.1	4.8

F = forecast.

Information contact: Alberto Jerardo, (202) 219-0708.

Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1990						1991
	1988	1989	1990	Jan	Aug	Sept	Oct	Nov	Dec R	Jan P
1977=100										
Prices received										
All farm products	138	147	150	154	150	148	148	146	143	144
All crops	128	134	128	135	125	123	120	124	121	122
Food grains	138	156	123	151	108	103	101	100	100	98
Feed grains & hay	120	128	123	120	128	120	114	113	115	116
Feed grains	117	123	118	115	122	116	108	108	110	110
Cotton	95	98	107	99	107	108	112	113	109	108
Tobacco	132	145	148	148	145	152	151	152	152	154
Oil-bearing crops	108	102	93	89	84	85	95	96	96	94
Fruit, all	185	192	191	170	182	198	181	205	194	206
Fresh market 1/	197	203	202	175	199	214	194	221	204	219
Commercial vegetables	140	151	154	248	138	141	156	162	148	149
Fresh market	135	144	144	241	128	138	150	161	135	143
Potatoes & dry beans	124	188	191	188	201	131	118	132	136	139
Livestock & products	150	160	171	172	174	173	171	166	164	165
Meat animals	168	174	193	185	197	193	196	190	190	191
Dairy products	126	140	142	162	147	146	136	132	123	121
Poultry & eggs	118	137	131	139	129	135	129	127	129	134
Prices paid										
Commodities & services,										
interest, taxes, & wage rates	170	178	184	181	—	—	187	—	—	187
Production items	167	167	171	169	—	—	174	—	—	173
Feed	128	135	128	128	—	—	124	—	—	123
Feeder livestock	192	194	213	205	—	—	219	—	—	216
Seed	150	165	165	170	—	—	163	—	—	163
Fertilizer	130	137	130	131	—	—	132	—	—	132
Agricultural chemicals	126	132	139	133	—	—	141	—	—	141
Fuels & energy	166	181	204	201	—	—	239	—	—	219
Farm & motor supplies	148	155	154	153	—	—	156	—	—	156
Autos & trucks	215	223	231	225	—	—	233	—	—	233
Tractors & self-propelled machinery	181	193	202	199	—	—	208	—	—	208
Other machinery	197	208	216	210	—	—	220	—	—	220
Building & fencing	138	141	144	143	—	—	144	—	—	144
Farm services & cash rent	148	158	166	166	—	—	166	—	—	172
Int. payable per acre on farm real estate debt	182	177	174	174	—	—	174	—	—	173
Taxes payable per acre on farm real estate	147	152	157	157	—	—	157	—	—	162
Wage rates (seasonally adjusted)	172	186	192	193	—	—	186	—	—	186
Production items, interest, taxes, & wage rates	160	167	172	170	—	—	174	—	—	174
Ratio, prices received to prices paid (%) 2/	82	83	82	85	82	80	78	78	76	77
Prices received (1910-14=100)	832	873	884	704	886	678	667	664	654	658
Prices paid, etc. (parity index) (1910-14=100)	1,167	1,221	1,265	1,247	—	—	1,289	—	—	1,289
Parity ratio (1910-14=100) (%) 2/	54	55	54	56	54	54	52	52	51	51

1/ Fresh market for noncitrus: fresh market & processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities & services, interest, taxes, & wage rates. Ratio uses the most recent prices paid index. Prices paid data are quarterly & will be published in January, April, July, & October. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1990						1991
	1988	1989	1990 P	Jan	Aug	Sept	Oct	Nov R	Dec	Jan P
CROPS										
All wheat (\$/bu.)	3.72	3.72	2.56-2.65	3.71	2.58	2.46	2.42	2.39	2.40	2.32
Rice, rough (\$/cwt)	6.83	7.35	6.25-7.25	7.44	6.74	6.25	6.02	6.30	6.08	6.33
Corn (\$/bu.)	2.84	2.36	2.20-2.40	2.31	2.51	2.32	2.19	2.17	2.22	2.22
Sorghum (\$/cwt)	4.05	3.79	3.70-4.24	3.58	4.14	3.95	3.55	3.57	3.67	3.82
All hay, baled (\$/ton)	85.20	86.00	86.00	84.90	84.40	85.70	86.00	81.80	80.70	82.00
Soybeans (\$/bu.)	7.42	5.70	5.40-6.00	5.85	6.00	5.99	5.87	5.78	5.72	5.48
Cotton, upland (cts./lb.) 2/	56.6	63.2	68.10	60.2	64.7	65.1	67.5	68.2	65.9	63.9
Potatoes (\$/cwt)	6.02	7.36	6.15	7.36	8.36	5.47	4.99	5.28	5.54	5.72
Lettuce (\$/cwt) 3/	14.70	12.80	11.80	9.42	14.50	18.40	19.70	18.50	10.70	11.50
Tomatoes fresh (\$/cwt) 3/	26.90	32.90	26.40	116.00	27.30	24.00	31.30	30.40	29.80	21.20
Onions (\$/cwt)	9.75	11.80	10.30	11.00	9.77	8.78	10.50	10.70	14.40	19.70
Dry edible beans (\$/cwt)	29.90	28.50	18.80	30.20	26.70	18.30	17.60	19.10	18.80	17.70
Apples for fresh use (cts./lb.)	17.4	13.4	—	12.2	20.4	24.5	19.4	20.2	20.8	20.1
Pears for fresh use (\$/ton)	358.00	336.00	392.00	303.00	288.00	389.00	373.00	390.00	361.00	356.00
Oranges, all uses (\$/box) 4/	7.18	6.89	5.99	4.95	5.07	5.31	4.48	6.31	6.18	6.82
Grapesfruit, all uses (\$/box) 4/	5.43	4.49	6.21	5.04	6.44	7.22	6.61	5.63	5.63	5.66
LIVESTOCK										
Beef cattle (\$/cwt)	66.80	69.70	74.80	73.70	76.10	75.00	75.60	75.30	76.10	76.00
Calves (\$/cwt)	89.90	91.80	96.70	91.00	99.20	95.50	92.80	93.90	96.80	96.30
Hogs (\$/cwt)	42.50	43.20	54.00	47.30	55.90	54.30	56.80	50.20	47.80	49.30
Lambs (\$/cwt)	69.50	67.30	66.00	66.40	54.00	52.80	52.00	50.10	48.60	48.60
All milk, sold to plants (\$/cwt)	12.26	13.66	13.75	15.70	14.30	14.20	13.20	12.80	11.90	11.70
Milk, manuf. grade (\$/cwt)	11.15	12.38	12.30	14.20	12.90	12.50	11.80	10.50	10.50	10.40
Broilers (cts./lb.)	34.0	36.0	32.9	30.7	33.2	35.2	29.0	28.2	28.8	30.9
Eggs (cts./doz.) 5/	53.3	70.0	70.0	83.8	65.8	68.5	73.5	72.9	78.5	79.1
Turkeys (cts./lb.)	37.0	40.0	38.3	35.9	39.9	40.6	42.2	43.0	35.6	33.9
Wool (cts./lb.) 6/	138.0	124.0	76.8	65.8	74.4	71.9	83.5	58.0	48.2	38.2

1/ Season average price by crop year for crops. Calendar year average of monthly prices for livestock. 2/ Weighted average of first 7 months of the season - not a projection for 1990/91. 3/ Excludes Hawaii. 4/ Equivalent on-tree returns. 5/ Average of all eggs sold by producers including hatching eggs & eggs sold at retail. 6/ Average local market price, excluding incentive payments. R = revised. P = preliminary. — not available.

Information contact: Ann Duncan (202) 219-0313.

Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1989	1990							
	1990	Dec	May	June	July	Aug	Sept	Oct	Nov	Dec
			1982-84=100							
Consumer Price Index, all items	130.7	120.5	129.2	129.9	130.4	131.6	132.7	133.5	133.8	133.8
Consumer Price Index, less food	130.3	120.4	128.7	129.4	130.0	131.3	132.6	133.5	133.7	133.7
All food	132.4	120.7	131.3	132.0	132.7	132.9	133.2	133.6	134.0	134.2
Food away from home	133.4	124.1	133.0	133.4	133.9	134.3	134.6	135.0	135.4	135.7
Food at home	132.3	119.1	130.9	131.7	132.5	132.7	132.9	133.4	133.8	133.8
Meats 1/	128.5	112.7	126.6	129.6	130.3	130.5	131.0	131.7	133.1	133.6
Beef & veal	128.8	114.6	128.5	129.0	129.2	128.5	129.5	130.1	131.9	133.0
Pork	129.8	109.6	125.5	132.9	134.8	136.5	135.4	136.4	137.1	136.8
Poultry	132.5	127.1	132.3	134.0	135.3	133.6	134.6	133.7	130.5	129.7
Fish	145.7	138.9	143.8	143.7	143.3	145.2	147.4	147.0	147.0	148.5
Eggs	124.1	99.6	115.0	112.2	109.1	119.6	120.6	125.5	128.5	128.7
Dairy products 2/	126.5	111.4	124.7	124.9	125.7	127.3	127.6	128.6	128.1	126.7
Fats & oils 3/	126.3	118.5	125.0	125.5	126.6	127.4	126.2	128.1	128.8	131.0
Fresh fruit	170.9	143.2	174.9	173.2	176.6	169.5	168.7	163.2	164.8	171.2
Processed fruit	136.9	124.4	139.2	140.1	140.1	140.0	139.9	139.5	137.0	134.6
Fresh vegetables	151.1	133.0	139.8	140.0	143.8	139.8	137.3	142.2	149.5	144.0
Potatoes	162.6	128.5	187.4	185.8	179.7	169.8	152.0	139.9	134.5	133.9
Processed vegetables	127.5	118.9	127.8	127.6	128.2	128.8	128.8	127.9	127.5	128.1
Cereals & bakery products	140.0	126.6	139.3	140.1	140.5	141.4	141.6	141.9	141.7	142.4
Sugar & sweets	124.7	116.7	124.4	124.5	124.9	125.6	125.8	126.6	126.1	126.4
Beverages, nonalcoholic	113.5	107.8	112.7	113.3	114.0	114.3	114.2	115.2	114.5	113.1
Apparel										
Apparel, commodities less footwear	122.8	116.8	124.5	121.8	118.8	120.5	125.8	127.4	126.4	123.8
Footwear	117.4	113.5	118.5	117.3	116.1	116.3	118.6	120.5	119.6	118.4
Tobacco & smoking products	181.5	149.9	176.7	180.9	185.7	185.8	185.8	185.9	187.2	190.5
Beverages, alcoholic	129.3	119.9	128.9	129.3	126.9	130.2	130.8	131.0	130.9	130.9

1/ Beef, veal, lamb, pork, & processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ann Duncan (202) 219-0313.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1989	1990					
	1987	1988	1989	Dec	July R	Aug R	Sept	Oct	Nov	Dec
	1982 = 100									
Finished goods 1/	105.4	108.0	113.6	115.4	118.2	119.3	120.3	122.3	122.9	121.9
Consumer foods	109.5	112.6	118.7	121.1	124.9	124.9	124.1	124.8	125.1	124.1
Fresh fruit	112.0	113.5	113.2	109.8	135.7	120.7	115.3	117.3	121.1	119.5
Fresh & dried vegetables	103.7	105.5	118.7	105.2	103.9	98.0	94.3	101.5	117.0	95.7
Dried fruit	95.0	99.1	103.0	106.3	105.0	105.0	104.9	110.0	110.4	110.5
Canned fruit & juice	115.3	120.2	122.7	123.4	127.8	128.1	127.7	127.8	125.1	125.1
Frozen fruit & juice	113.3	129.8	123.9	118.1	148.6	148.4	139.5	137.0	119.1	118.3
Fresh veg. excl. potatoes	99.0	100.4	103.9	88.4	93.3	79.0	79.4	96.2	117.7	87.2
Canned veg. & juices	103.5	108.3	118.6	118.0	118.5	115.2	118.5	114.4	114.5	114.0
Frozen vegetables	107.3	108.6	115.5	117.1	118.1	118.3	118.3	131.0	118.9	119.0
Potatoes	120.1	113.9	153.6	160.2	134.4	161.9	155.4	121.6	129.4	135.5
Eggs	87.6	88.6	119.6	141.3	91.6	114.4	112.6	121.6	125.0	124.5
Bakery products	118.4	126.4	135.4	138.4	140.7	141.0	141.8	142.4	142.4	142.6
Meats	100.4	99.9	104.8	108.4	119.8	119.8	116.7	119.5	119.6	119.6
Beef & veal	95.5	101.4	108.9	110.7	113.3	118.2	114.1	117.4	119.7	121.2
Pork	104.9	95.0	97.7	105.1	130.7	126.2	119.7	124.0	120.7	118.6
Processed poultry	103.4	111.6	120.4	108.5	120.6	114.4	116.9	110.0	108.6	106.8
Fish	140.0	148.7	142.9	138.2	136.6	138.9	144.2	143.6	157.7	160.2
Dairy products	101.8	102.2	110.6	121.4	119.5	120.2	119.0	117.4	114.9	112.2
Processed fruits & vegetables	108.6	113.6	119.9	120.4	128.1	125.8	125.2	124.2	120.7	120.2
Shortening & cooking oil	103.9	118.8	118.6	116.2	127.6	129.4	127.0	122.7	119.2	120.4
Consumer finished goods less foods 1/	100.7	103.1	108.9	110.4	113.2	115.1	117.7	120.6	121.3	119.8
Beverages, alcoholic	110.3	111.8	115.2	114.6	117.7	118.8	117.3	117.4	117.4	117.0
Soft drinks	111.8	114.3	177.7	119.8	121.2	121.6	121.7	122.4	122.6	123.0
Apparel	108.3	111.7	114.5	115.7	117.7	118.0	117.6	118.0	117.9	117.3
Footwear	109.3	115.1	120.8	123.1	125.6	125.8	126.3	126.1	125.8	126.1
Tobacco products	154.6	171.9	194.8	209.6	224.3	224.3	225.0	224.8	230.4	236.4
Intermediate materials 2/	101.5	107.1	112.0	111.9	113.1	114.4	116.3	117.8	117.8	116.7
Materials for food manufacturing	100.8	106.0	112.7	115.5	120.8	120.4	118.8	117.2	118.0	116.4
Flour	92.9	105.7	114.6	113.6	103.1	96.5	94.5	93.6	92.0	92.6
Refined sugar 3/	106.4	108.9	118.2	122.0	123.2	122.6	122.7	123.1	123.0	122.9
Crude vegetable oils	84.2	118.6	103.1	97.9	124.4	126.4	124.5	115.2	105.0	111.2
Crude materials 4/	93.7	96.0	103.1	104.2	101.4	110.2	115.1	124.6	116.8	110.5
Foodstuffs & feedstuffs	96.2	106.1	111.2	112.6	115.4	113.2	110.8	110.9	108.6	108.5
Fruits & vegetables 5/	106.8	108.5	114.6	106.7	117.3	107.4	103.0	107.9	118.2	105.7
Grains	71.1	97.9	106.4	101.0	103.1	92.1	88.3	85.8	85.1	88.0
Livestock	102.0	103.3	106.1	110.6	114.7	117.8	113.3	116.5	113.9	114.3
Poultry, live	101.2	121.5	128.8	104.3	134.7	122.1	128.9	110.2	108.3	104.2
Fibers, plant & animal	106.4	98.4	107.8	106.3	129.4	125.1	116.6	116.4	115.0	116.9
Fluid milk	91.8	89.4	98.8	116.2	105.3	105.5	106.0	98.4	91.7	87.5
Oilseeds	99.2	134.0	123.8	106.7	114.8	114.8	116.5	119.8	111.0	115.8
Tobacco, leaf	85.7	87.2	93.8	93.7	93.7	93.1	100.9	98.3	98.9	98.9
Sugar, raw cane	110.2	111.9	115.5	117.5	119.6	119.6	119.7	119.8	119.4	117.2
All commodities	102.8	106.9	112.2	113.0	114.5	116.5	118.3	120.8	120.1	118.6
Industrial commodities	102.5	106.3	111.6	112.3	113.4	115.9	118.3	121.3	120.6	118.9
All foods 6/	107.8	111.5	117.8	119.9	124.2	124.0	122.9	123.0	123.6	122.6
Farm products & processed foods & feeds	103.7	110.0	115.4	116.6	120.0	119.1	117.9	118.1	117.4	117.0
Farm products	95.5	104.9	110.9	111.5	113.6	111.4	109.0	109.8	108.3	107.6
Processed foods & feeds 6/	107.9	112.7	117.8	119.3	123.2	123.0	122.4	122.2	121.9	121.7
Cereal & bakery products	112.6	123.0	131.1	133.3	134.3	134.2	133.4	134.2	134.0	134.3
Sugar & confectionery	112.6	114.7	120.1	121.0	123.9	123.7	123.9	123.0	125.0	124.9
Beverages	112.5	114.3	118.4	118.4	120.9	120.6	120.8	120.7	120.8	120.7

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types & sizes of refined sugar. 4/ Products entering market for the first time that have not been manufactured at that point. 5/ Fresh & dried. 6/ Includes all raw, intermediate, & processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). R = revised.

Information contact: Ann Duncan (202) 219-0313.

Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual			1990						
	1988	1989	1990 P	Dec	July	Aug	Sept	Oct	Nov	Dec
Market basket 1/										
Retail cost (1982-84=100)	118.5	124.6	133.5	127.4	133.6	134.0	134.1	134.6	135.2	135.4
Farm value (1982-84=100)	100.5	107.1	113.7	110.2	114.3	114.0	111.7	111.1	110.6	107.1
Farm-retail spread (1982-84=100)	125.1	134.1	144.2	138.6	144.0	144.7	148.2	147.3	148.5	150.6
Farm value-retail cost (%)	30.2	30.1	29.8	30.3	30.0	29.8	29.2	28.9	28.6	27.7
Meat products										
Retail cost (1982-84=100)	112.2	116.7	128.5	120.0	130.3	130.5	131.0	131.7	133.1	133.6
Farm value (1982-84=100)	99.5	103.3	118.6	106.9	118.9	120.2	114.9	119.0	118.5	114.3
Farm-retail spread (1982-84=100)	125.2	130.4	140.6	133.4	142.0	141.1	147.5	144.8	150.1	153.4
Farm value-retail cost (%)	44.9	44.8	48.0	45.1	46.2	46.7	44.4	45.7	44.3	43.3
Dairy products										
Retail cost (1982-84=100)	108.4	115.6	126.5	122.9	125.7	127.3	127.6	128.6	129.1	128.7
Farm value (1982-84=100)	90.6	99.1	102.0	113.6	103.8	105.0	105.6	99.2	95.7	90.3
Farm-retail spread (1982-84=100)	124.7	130.8	149.1	131.4	145.9	147.8	147.9	155.7	157.9	160.3
Farm value-retail cost (%)	40.1	41.1	38.7	44.4	39.6	39.8	39.7	37.0	35.9	34.2
Poultry										
Retail cost (1982-84=100)	120.7	132.7	132.5	127.8	135.3	133.6	134.6	133.7	130.5	129.7
Farm value (1982-84=100)	110.2	117.1	107.6	96.5	118.8	109.3	115.1	99.0	97.2	95.3
Farm-retail spread (1982-84=100)	132.8	150.6	181.1	163.8	154.5	181.6	157.1	173.7	168.8	169.3
Farm value-retail cost (%)	48.9	47.2	43.5	40.4	48.9	43.8	45.7	39.6	39.9	39.3
Eggs										
Retail cost (1982-84=100)	93.6	118.5	124.1	134.9	109.1	119.6	120.6	125.5	128.5	128.7
Farm value (1982-84=100)	76.7	107.5	108.0	133.4	80.1	100.0	105.9	114.3	113.8	120.8
Farm-retail spread (1982-84=100)	123.9	138.1	153.2	137.6	181.2	154.7	147.1	145.7	155.0	142.8
Farm value-retail cost (%)	52.7	58.3	55.9	63.5	47.2	53.7	56.4	58.5	56.9	60.3
Cereal & bakery products										
Retail cost (1982-84=100)	122.1	132.4	140.0	136.1	140.5	141.4	141.6	141.9	141.7	142.4
Farm value (1982-84=100)	92.7	101.7	90.5	101.0	89.8	85.5	81.5	78.7	77.9	78.8
Farm-retail spread (1982-84=100)	128.2	136.7	148.9	141.0	147.6	149.2	150.0	150.7	150.6	151.3
Farm value-retail cost (%)	9.3	9.4	7.9	9.1	7.8	7.4	7.0	6.8	6.7	6.8
Fresh fruits										
Retail cost (1982-84=100)	145.4	154.7	174.6	158.6	177.2	173.1	171.9	167.2	169.3	176.6
Farm value (1982-84=100)	116.5	108.5	128.2	113.5	124.5	119.7	126.0	131.1	150.4	134.8
Farm-retail spread (1982-84=100)	158.7	176.0	195.9	179.4	201.5	197.7	193.1	183.9	178.0	195.9
Farm value-retail cost (%)	25.3	22.2	23.2	22.6	22.2	21.8	23.2	24.8	28.1	24.1
Fresh vegetables										
Retail cost (1982-84=100)	129.3	143.1	151.1	136.5	143.8	139.8	137.3	142.2	149.5	144.0
Farm value (1982-84=100)	105.8	123.3	132.0	112.6	115.6	112.7	93.2	106.0	117.8	99.7
Farm-retail spread (1982-84=100)	141.3	153.2	161.0	148.8	158.3	153.7	160.0	160.8	165.8	166.8
Farm value-retail cost (%)	27.8	29.3	29.7	28.0	27.3	27.4	23.1	25.3	26.8	23.5
Processed fruits & vegetables										
Retail cost (1982-84=100)	117.6	125.0	132.7	124.9	134.8	135.0	135.0	134.3	132.8	131.6
Farm value (1982-84=100)	136.6	133.6	148.0	127.7	153.2	148.7	151.1	150.0	147.2	148.6
Farm-retail spread (1982-84=100)	111.7	122.3	127.9	124.0	129.1	130.7	130.0	129.4	128.3	126.3
Farm value-retail cost (%)	27.6	25.4	26.5	24.3	27.0	28.2	26.6	26.6	26.4	26.8
Fats & oils										
Retail cost (1982-84=100)	113.1	121.2	126.3	121.6	126.6	127.4	128.2	128.1	128.8	131.0
Farm value (1982-84=100)	103.0	95.6	106.4	92.9	110.9	113.5	110.0	105.4	100.6	103.0
Farm-retail spread (1982-84=100)	116.8	130.6	133.7	132.2	132.4	132.5	134.9	136.5	139.2	141.3
Farm value-retail cost (%)	24.6	21.2	22.7	20.5	23.6	24.0	23.1	22.1	21.0	21.1
	Annual			1990						
	1988	1989	1990 P	Dec	July	Aug	Sept	Oct	Nov	Dec
Beef, Choice										
Retail price 2/ (cts./lb.)	250.3	265.7	281.0	269.4	279.9	280.6	280.6	282.7	291.6	295.3
Wholesale value 3/ (cts.)	169.4	176.8	190.0	183.8	183.3	187.8	187.3	193.0	198.5	200.2
Net farm value 4/ (cts.)	148.3	157.6	168.4	164.9	160.5	166.7	166.8	171.1	174.8	174.8
Farm-retail spread (cts.)	102.0	108.1	112.6	104.5	119.4	113.9	113.8	111.6	116.8	120.5
Wholesale-retail 5/ (cts.)	80.9	88.9	91.0	85.8	96.6	92.8	93.3	89.7	93.1	95.1
Farm-wholesale 6/ (cts.)	21.1	19.2	21.6	18.9	22.8	21.1	20.5	21.9	23.7	25.4
Farm value-retail price (%)	59	59	60	61	57	59	59	61	60	59
Pork										
Retail price 2/ (cts./lb.)	183.4	182.9	212.6	191.2	222.2	224.9	220.8	223.2	222.9	223.2
Wholesale value 3/ (cts.)	101.0	99.2	118.3	112.3	127.3	120.5	120.7	124.4	119.7	117.5
Net farm value 4/ (cts.)	69.4	70.4	87.2	79.5	99.2	90.4	88.0	91.2	79.1	77.3
Farm-retail spread (cts.)	114.0	112.5	125.4	111.7	123.0	134.5	132.8	132.0	143.8	145.9
Wholesale-retail 5/ (cts.)	82.4	83.7	94.3	78.9	94.9	104.4	100.1	98.9	103.2	105.7
Farm-wholesale 6/ (cts.)	31.6	28.8	31.1	32.8	28.1	30.1	32.7	33.2	40.6	40.2
Farm value-retail price (%)	36	38	41	42	45	40	40	41	35	35

1/ Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by BLS. The farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm-retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing. 2/ Weighted average price of retail cuts from pork & choice yield grade 3 beef. Prices from BLS. 3/ Value of wholesale (boxed beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs & byproduct values. 4/ Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of byproducts. 5/ Charges for retailing & other marketing services such as wholesaling, and in-city transportation. 6/ Charges for livestock marketing, processing, & transportation.

Note: Choice beef series reflects August 1990 revisions.

Information contacts: Denis Dunham (202) 219-0970, Larry Duewer (202) 219-0712.

Table 9.—Price Indexes of Food Marketing Costs

	Annual			1989		1990			
	1988	1989	1990 P	III	IV	I	II	III	IV P
	1987=100*								
Labor—hourly earnings & benefits	370.1	379.5	393.1	378.6	382.6	388.8	392.0	392.5	392.8
Processing	382.0	390.3	404.9	389.6	392.4	400.7	404.1	404.4	402.9
Wholesaling	394.1	409.1	421.5	410.7	413.0	417.0	419.5	423.2	422.5
Retailing	347.7	355.8	368.8	353.3	359.3	364.3	367.7	367.0	369.7
Packaging & containers	350.7	364.6	367.6	366.1	365.2	367.1	367.3	366.5	366.8
Paperboard boxes & containers	308.1	323.7	323.9	325.5	326.9	326.7	324.1	322.3	322.2
Metal cans	442.3	443.2	455.0	448.2	448.2	450.9	456.3	456.3	456.3
Paper bags & related products	372.2	409.2	413.0	409.2	407.7	411.5	408.9	410.2	412.6
Plastic films & bottles	305.7	313.2	307.1	311.3	306.7	308.5	306.9	303.9	303.5
Glass containers	398.9	409.9	427.3	413.5	412.0	422.2	428.0	428.9	429.2
Metal foil	266.9	274.4	258.4	271.6	265.1	250.0	257.6	261.4	262.5
Transportation services	403.5	404.9	411.3	406.2	406.6	410.9	410.5	408.2	409.7
Advertising	384.7	409.1	432.9	411.5	416.2	425.3	429.6	435.1	437.1
Fuel & power	578.2	619.4	671.4	620.0	641.5	652.6	615.0	668.0	723.7
Electric	453.3	468.9	477.7	492.0	466.4	464.2	470.3	496.0	493.5
Petroleum	502.0	592.1	744.8	560.0	664.6	693.3	582.6	713.4	892.5
Natural gas	1,042.1	1,070.9	1,071.0	1,067.2	1,074.8	1,092.3	1,059.0	1,056.6	1,062.2
Communications, water & sewage	241.3	247.3	253.1	248.9	248.7	251.5	253.0	253.0	254.9
Rent	272.6	277.1	274.2	277.1	277.1	272.2	274.6	274.9	274.9
Maintenance & repair	395.9	410.7	426.7	412.9	416.2	421.1	425.2	428.2	429.7
Business services	364.6	388.3	404.7	389.9	393.9	399.0	403.3	407.5	408.0
Supplies	305.6	321.4	321.1	321.1	319.3	318.7	318.9	320.1	322.7
Property taxes & insurance	419.9	439.7	462.2	442.3	449.4	452.7	456.5	468.3	470.2
Interest, short-term	150.3	172.1	155.4	164.2	157.6	158.0	160.3	153.2	152.6
Total marketing cost index	372.4	384.8	397.5	385.1	388.3	393.4	393.9	397.0	400.3

* Indexes measure changes in employee earnings & benefits & in prices of supplies & services used in processing, wholesaling, & retailing U.S. farm foods purchased for at-home consumption. P = preliminary.

Information contact: Denise Dunham (202) 219-0870.

Livestock & Products

Table 10.—U.S. Meat Supply & Use

	Beg. stocks	Production 1/	Imports	Total supply	Exports	Ending stocks	Consumption		Primary market price 3/
							Total	Per capita 2/	
Million pounds 4/							Pounds		
Beef									
1988	388	23,589	2,379	26,354	680	422	25,252	72.3	69.54
1989	422	23,087	2,175	25,684	1,023	335	24,328	68.9	72.52
1990	335	22,736	2,350	25,421	1,035	407	23,979	67.4	77-80
1991 F	407	23,113	2,270	25,790	1,055	315	24,420	68.0	75-81
Pork									
1988	360	15,684	1,137	17,181	195	437	16,549	63.5	43.39
1989	437	15,813	896	17,146	262	315	16,569	63.1	44.03
1990	315	15,345	914	16,574	228	298	16,048	60.6	54.45
1991 F	298	15,654	960	16,912	240	376	16,297	61.1	50-56
Veal 5/									
1988	4	396	27	427	10	8	412	1.4	89.85
1989	5	355	0	360	0	4	356	1.2	91.84
1990	4	330	0	334	0	6	328	1.1	96.69
1991 F	6	301	0	307	0	4	303	1.0	95-101
Lamb & mutton									
1988	8	335	51	394	1	6	387	1.4	68.26
1989	6	347	63	416	2	8	406	1.5	67.32
1990	8	364	57	429	2	8	419	1.5	55.54
1991 F	8	369	55	429	2	7	420	1.5	62-68
Total red meat									
1988	758	40,004	3,564	44,356	886	870	42,600	138.6	—
1989	870	39,602	3,134	43,606	1,287	662	41,657	134.7	—
1990	662	38,775	3,321	42,758	1,265	719	40,774	130.5	—
1991 F	719	39,434	3,285	43,438	1,297	701	41,440	131.6	—
Broilers									
1988	25	16,187	0	16,212	765	36	15,410	62.6	56.3
1989	36	17,428	0	17,464	814	38	16,612	66.8	59.0
1990	38	18,680	0	18,718	1,143	25	17,550	69.9	54.8
1991 F	25	19,631	0	19,656	1,025	30	18,601	73.5	51-57
Mature chicken									
1988	188	633	0	821	26	157	639	2.6	—
1989	157	575	0	731	24	189	518	2.1	—
1990	189	567	0	756	25	227	504	2.0	—
1991 F	227	570	0	797	26	225	546	2.2	—
Turkeys									
1988	266	3,960	0	4,226	51	250	3,926	15.9	51.2
1989	250	4,276	0	4,526	41	236	4,250	17.1	66.7
1990	236	4,875	0	4,911	53	310	4,549	18.1	63.2
1991 F	310	4,886	0	5,196	52	260	4,884	19.3	59-65
Total poultry									
1988	479	20,780	0	21,259	842	442	19,975	81.1	—
1989	442	22,280	0	22,722	878	463	21,380	85.9	—
1990	463	23,922	0	24,385	1,220	562	22,603	90.0	—
1991 F	562	25,087	0	25,649	1,103	515	24,031	95.0	—
Red meat & poultry									
1988	1,237	60,784	3,564	65,815	1,728	1,312	62,574	219.6	—
1989	1,312	61,882	3,134	66,328	2,165	1,125	63,037	220.6	—
1990	1,125	62,697	3,321	67,143	2,485	1,281	63,377	220.6	—
1991 F	1,281	64,521	3,285	69,087	2,400	1,216	65,471	226.5	—

1/ Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was .71 for 1987, & .70.6 for 1988-90.) 3/ Dollars per cwt for red meat, cents per pound for poultry. Beef: Choice steers, Omaha 1,000-1,100 lb.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb & mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 veal trade no longer reported separately. F = forecast. — = not available.

Information contacts: Polly Cochran, or Maxine Davis (202) 219-0767.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Pro-duction	Im-ports	Total supply	Ex-ports	Hatch-Ing use	Ending stocks	Consumption		Wholesale price*
								Total	Per capita	
				Million dozen						Cts./doz.
1986	10.7	5,766.3	13.7	5,790.7	101.6	566.8	10.4	5,111.9	253.8	71.1
1987	10.4	5,888.2	5.6	5,894.2	111.2	599.1	14.4	5,159.5	253.8	81.0
1988	14.4	5,784.2	5.3	5,803.9	141.8	605.9	15.2	5,041.0	245.6	82.1
1989	15.2	5,597.8	25.2	5,638.2	91.6	642.9	10.7	4,893.0	236.0	81.9
1990	10.7	5,659.2	9.7	5,679.6	100.0	675.8	11.2	4,892.5	233.9	82.2
1991 F	11.2	5,715.0	7.0	5,733.2	104.0	720.0	12.0	4,897.2	232.3	73-79

* Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 219-0767.

Table 12.—U.S. Milk Supply & Use¹

	Pro-duction	Farm use	Commercial		Im-ports	Total commercial supply	CCC net re-movals	Commercial		All milk price 2/
			Farm market-ings	Beg. stock				Ending stocks	Disap-pear-ance	
Billion pounds										
1983	139.8	2.4	137.2	4.6	2.6	144.4	16.8	5.2	122.4	13.58
1984	135.4	2.9	132.4	5.2	2.7	140.4	8.6	4.9	126.8	13.46
1985	143.0	2.5	140.6	4.9	2.8	148.3	13.2	4.6	130.5	12.75
1986	143.1	2.4	140.7	4.6	2.7	148.1	10.6	4.2	133.3	12.51
1987	142.7	2.3	140.5	4.2	2.5	147.1	6.7	4.6	135.8	12.54
1988	145.2	2.2	142.9	4.6	2.4	150.0	8.9	4.3	136.8	12.24
1989	144.3	2.1	142.2	4.3	2.5	148.9	9.0	4.1	135.8	13.54
1990	148.6	2.1	146.5	4.1	2.8	153.4	8.5	5.3	139.6	13.75
1991 F	150.3	2.1	148.2	5.3	2.5	156.0	7.4	4.8	143.8	11.45

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants & dealers; does not reflect deductions. F = forecast.

Information contact: Jim Miller (202) 219-0770.

Table 13.—Poultry & Eggs

	Annual			1989		1990				
	1988	1989	1990	Dec	July	Aug	Sept	Oct	Nov	Dec
Broilers										
Federally inspected slaughter, certified (mil. lb.)	16,124.4	17,334.2	18,572	1,491.1	1,516.6	1,691.6	1,421.4	1,768.6	1,564.3	1,457.1
Wholesale price, 12-city (cts./lb.)	56.3	59.0	54.8	48.4	59.5	54.9	57.4	48.8	48.0	49.6
Price of grower feed (\$/ton)	220	237	218.3	220	224	221	220	207	209	213
Broiler-feed price ratio 1/	3.1	3.0	3.0	2.6	3.3	3.0	3.2	2.8	2.7	2.7
Stocks beginning of period (mil. lb.)	24.6	35.9	38.3	40.6	30.0	34.3	25.9	23.9	26.9	27.7
Broiler-type chicks hatched (mil.) 2/	5,602.4	5,944.3	6,300.6	522.1	541.0	540.8	508.6	510.3	490.2	547.1
Turkeys										
Federally inspected slaughter, certified (mil. lb.)	3,923.4	4,174.8	4,500.2	334.9	395.7	444.0	382.9	478.4	445.8	328.2
Wholesale price, Eastern U.S., 8-10 lb. young hens (cts./lb.)	61.2	66.7	63.2	72.7	63.4	66.6	69.0	76.2	73.7	56.1
Price of turkey grower feed (\$/ton)	243	251	238.4	248	240	235	239	234	239	237
Turkey-feed price ratio 1/	3.0	3.2	3.2	3.2	3.2	3.4	3.4	3.0	3.0	3.0
Stocks beginning of period (mil. lb.)	266.2	249.7	235.9	258.6	489.3	541.7	503.1	620.4	622.9	338.4
Poults placed in U.S. (mil.)	261.4	289.0	304.2	21.5	29.0	25.6	19.7	21.5	21.6	22.8
Eggs										
Farm production (mil.)	69,410	67,173	67,910	5,777	5,703	5,719	5,534	5,785	5,689	5,855
Average number of layers (mil.)	277	269	270	271	266	267	268	270	271	272
Rate of lay (eggs per layer on farms)	251	250	251.7	21.3	21.4	21.4	20.6	21.5	21.0	21.5
Cartoned price, New York, grade A large (cts./doz.) 3/	62.1	61.9	62.2	99.6	70.9	80.3	82.2	86.5	86.5	92.5
Price of laying feed (\$/ton)	202	208	202	200	206	205	204	199	200	199
Egg-feed price ratio 1/	5.3	6.7	6.9	8.3	5.4	6.4	6.7	7.4	7.3	7.7
Stocks, first of month										
Shell (mil. doz.)	1.29	0.27	0.35	0.33	0.66	0.87	0.57	0.64	0.33	0.48
Frozen (mil. doz.)	13.1	14.9	10.3	10.2	13.7	13.0	13.0	12.6	12.8	13.0
Replacement chicks hatched (mil.)	366	384	400.8	29.3	31.7	33.0	32.7	32.1	30.0	31.1

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 15 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Maxine Davis (202) 219-0767.

Table 14.—Dairy

	Annual			1989	1990					
	1988	1989	1990	Dec	July	Aug	Sept	Oct	Nov	Dec
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	11.03	12.37	12.21	14.93	13.43	13.09	12.50	10.48	10.25	10.19
Wholesale prices										
Butter, grade A Chl. (cts./lb.)	132.6	127.9	102.1	120.0	100.3	98.9	98.9	98.9	98.9	98.0
Am. cheese, Wis. assembly pt. (cts./lb.)	123.8	138.8	136.2	162.2	151.0	150.3	142.6	114.9	112.0	112.7
Nonfat dry milk (cfs./lb.) 2/	80.2	105.5	100.6	128.0	125.2	112.1	92.0	88.6	86.8	86.2
USDA net removals										
Total milk equiv. (mil. lb.) 3/	8,856.2	8,967.9	8,640.6	483.4	467.8	324.5	119.2	249.9	273.9	803.4
Butter (mil. lb.)	312.8	413.4	400.3	22.1	15.6	18.6	5.6	11.8	10.8	30.6
Am. cheese (mil. lb.)	238.1	37.4	21.5	0	0	0	0	0	4.5	17.0
Nonfat dry milk (mil. lb.)	267.6	0	117.8	0	0	0	15.9	22.6	34.1	42.8
Milk										
Milk prod. 21 States (mil. lb.)	123,518	122,531	125,982	10,047	10,095	10,479	10,019	10,248	10,030	10,457
Milk per cow (lb.)	14,291	14,370	14,772	1,176	1,257	1,229	1,173	1,200	1,172	1,222
Number of milk cows (1,000)	8,643	8,527	8,529	8,544	8,511	8,523	8,540	8,542	8,558	8,555
U.S. milk production (mil. lb.)	145,152	144,252	148,555	11,860	12,580	12,325	11,784	12,109	11,850	12,355
Stock, beginning										
Total (mil. lb.)	7,440	8,234	8,795	9,808	13,241	13,452	13,451	12,982	12,834	12,605
Commercial (mil. lb.)	4,646	4,289	4,131	4,196	6,495	6,853	6,807	6,355	5,198	5,164
Government (mil. lb.)	2,794	3,945	4,664	5,410	7,746	7,799	7,844	7,628	7,635	7,440
Imports, total (mil. lb.) 3/	2,394	2,499	—	285	233	208	222	248	262	—
Commercial disappearance (mil. lb.)	136,805	135,843	—	11,391	12,012	12,079	11,969	12,089	11,702	—
Butter										
Production (mil. lb.)	1,207.6	1,273.6	1,285.7	107.4	85.1	83.8	84.8	105.0	111.0	116.5
Stocks, beginning (mil. lb.)	143.2	214.7	258.2	294.1	417.2	418.1	423.9	408.6	411.3	404.6
Commercial disappearance (mil. lb.)	909.8	854.1	—	87.6	64.6	66.7	86.2	93.3	97.7	—
American cheese										
Production (mil. lb.)	2,756.6	2,672.8	2,891.3	230.8	236.4	229.3	220.6	236.9	235.4	251.6
Stocks, beginning (mil. lb.)	370.4	293.0	236.2	238.0	333.1	357.8	356.5	347.4	337.3	334.6
Commercial disappearance (mil. lb.)	2,670.0	2,681.6	—	231.9	214.7	232.0	230.2	246.8	238.5	—
Other cheese										
Production (mil. lb.)	2,818.4	2,941.3	3,146.7	258.7	266.2	258.6	256.2	266.8	253.5	264.3
Stocks, beginning (mil. lb.)	89.7	104.7	93.2	95.4	129.1	124.0	117.9	111.1	107.1	102.9
Commercial disappearance (mil. lb.)	3,034.5	3,208.9	—	293.2	296.9	290.6	285.0	296.0	286.4	—
Nonfat dry milk										
Production (mil. lb.)	970.7	874.7	869.9	84.8	72.7	82.9	50.6	56.2	71.1	78.0
Stocks, beginning (mil. lb.)	177.2	63.1	49.6	32.5	93.3	108.7	123.6	121.2	129.2	143.6
Commercial disappearance (mil. lb.)	734.3	873.0	—	48.7	57.7	48.0	42.2	32.9	37.3	—
Frozen dessert										
Production (mil. gal.) 4/	1,248.9	1,214.0	1,187.2	77.1	126.3	116.0	94.0	91.3	78.3	74.1
	Annual			1989			1990			
	1988	1989	1990	II	III	IV	I	II P	III P	IV P
Milk production (mil. lb.)	145,152	144,252	148,555	37,702	35,188	34,917	36,940	38,811	39,689	36,314
Milk per cow (lb.)	14,145	14,244	14,646	3,727	3,484	3,448	3,644	3,813	3,818	3,571
No. of milk cows (1,000)	10,282	10,127	10,144	10,116	10,101	10,127	10,137	10,128	10,142	10,169
Milk-feed price ratio 5/	1.58	1.64	1.72	1.48	1.63	1.92	1.82	1.69	1.76	1.60
Returns over concentrate 5/ costs (\$/cwt milk)	9.05	10.08	10.40	8.96	9.92	12.16	11.30	10.27	10.90	9.30

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area. 3/ Milk equivalent, fat basis. 4/ Hard ice cream, ice milk, & hard sherbet. 5/ Based on average milk price after adjustment for price support deductions. 6/ Estimated. P = preliminary. — = not available.

Information contact: LaVerne T. Williams (202) 219-0770.

Table 15.—Wool

	Annual			1989		1990			
	1988	1989	1990	III	IV	I	II	III	IV
U.S. wool price, (cts./lb.) 1/	438	370	256	350	328	289	272	238	227
Imported wool price, (cts./lb.) 2/	372	354	287	309	316	327	312	281	270
U.S. mill consumption, scoured 3/									
Apparel wool (1,000 lb.)	117,069	112,998	14,168	25,983	24,921	29,948	29,998	25,631	26,523
Carpet wool (1,000 lb.)	15,833	14,122	14,134	3,665	2,984	3,779	2,923	3,771	2,977

1/ Wool price delivered at U.S. mills, clean basis. Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. 3/ Beginning 1990 mill consumption reported only on a quarterly basis.

Information contact: John Lawler (202) 219-0840.

Table 16.—Meat Animals

	Annual			1989	1990					
	1988	1989	1990	Dec	July	Aug	Sept	Oct	Nov	Dec
Cattle on feed (7 States)										
Number on feed (1,000 head) 1/	8,411	8,045	8,378	8,331	7,310	7,003	6,990	7,670	8,729	9,129
Placed on feed (1,000 head)	20,854	20,834	21,215	1,537	1,520	1,735	2,204	2,751	2,007	1,478
Marketings (1,000 head)	19,918	19,422	19,238	1,403	1,750	1,666	1,445	1,805	1,512	1,349
Other disappearance (1,000 head)	1,202	1,079	1,218	87	77	82	79	87	95	121
Beef steer—corn price ratio,										
Omaha 2/	31.5	30.3	32.8	32.8	28.5	30.9	34.5	36.5	37.3	36.5
Hog—corn price ratio, Omaha 2/	19.6	18.4	23.1	21.7	23.9	23.1	25.1	27.0	23.2	22.0
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, Omaha	69.54	72.52	77.40	75.21	74.48	76.22	75.75	77.50	79.93	80.88
Utility cows, Omaha	48.55	47.88	53.31	49.38	54.58	66.07	54.33	51.10	50.48	50.00
Feeder cattle										
Choice, Kansas City, 600–700 lb.	83.68	88.13	90.88	88.25	93.50	92.30	91.50	NQ	92.75	92.67
Slaughter hogs										
Barrows & gilts, 7–markets	43.39	44.03	54.45	49.33	81.87	68.05	55.10	57.15	49.70	48.15
Feeder pigs										
S. Mo. 40–50 lb. (per head)	38.06	33.63	51.46	38.21	46.35	45.85	45.91	52.33	48.22	49.63
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	68.26	67.32	55.54	61.00	53.25	51.20	51.75	52.50	50.42	48.08
Ewes, Good, San Angelo	38.88	38.58	35.21	39.42	34.83	36.60	32.88	32.00	33.83	34.67
Feeder lambs										
Choice, San Angelo	90.89	79.85	82.95	76.00	53.75	58.30	55.75	55.90	57.83	59.17
Wholesale meat prices, Midwest										
Boxed beef cut—out value*	110.50	114.78	123.21	119.52	118.54	121.52	121.18	124.98	128.32	129.48
Canner & cutter cow beef	87.77	94.43	99.96	100.73	101.62	105.22	101.93	102.58	99.87	104.74
Pork loins, 14–18 lb. 3/	97.49	101.09	117.52	107.28	144.14	119.58	121.64	113.71	98.94	103.50
Pork bellies, 12–14 lb.	41.25	34.14	53.80	42.23	53.18	51.08	51.31	59.83	60.57	58.58
Hams, skinned, 14–17 lb.	71.03	69.39	87.70	78.89	91.00	NQ	101.75	107.24	108.00	88.13
All fresh beef retail price 4/	224.81	238.97	254.99	265.75	255.75	254.71	266.39	259.39	265.75	282.84
Commercial slaughter (1,000 head)*										
Cattle	35,081	33,918	33,220	2,680	2,852	2,983	2,814	2,990	2,701	2,451
Steers	17,344	16,536	16,577	1,283	1,451	1,508	1,275	1,401	1,302	1,227
Heifers	10,754	10,406	10,089	790	909	928	842	919	787	694
Cows	6,338	6,318	5,910	559	439	486	444	579	559	485
Bulls & stags	644	657	644	48	53	63	55	61	53	45
Calves	2,507	2,172	1,807	172	144	152	138	162	155	142
Sheep & lambs	5,294	5,468	5,649	469	447	482	439	607	480	464
Hogs	87,794	88,691	85,118	7,233	6,154	7,301	6,899	7,739	7,538	7,354
Commercial production (mil. lb.)										
Beef	23,424	22,974	22,618	1,828	1,939	2,062	1,813	2,042	1,842	1,680
Veal	387	344	321	25	26	28	26	31	29	28
Lamb & mutton	329	341	360	31	28	30	27	32	30	30
Pork	15,623	15,759	15,291	1,288	1,102	1,309	1,228	1,389	1,374	1,342
	Annual			1989		1990				
	1988	1989	1990	III	IV	I	II	III	IV	I
Cattle on feed (13 States)										
Number on feed (1,000 head) 1/	10,114	9,688	9,943	8,680	8,276	9,943	10,063	8,761	9,092	10,937
Placed on feed (1,000 head)	24,423	24,469	24,948	5,719	7,306	6,083	5,089	6,333	7,446	—
Marketings (1,000 head)	23,459	22,940	22,561	5,898	5,348	5,578	5,988	5,741	6,254	6,745
Other disappearance (1,000 head)	1,390	1,274	1,393	227	283	385	400	281	347	—
Hogs & pigs (10 States) 5/										
Inventory (1,000 head) 1/	42,675	43,210	42,200	44,020	45,200	42,200	40,190	42,800	44,410	—
Breeding (1,000 head) 1/	5,435	5,335	5,280	5,565	5,335	5,280	5,250	5,440	5,340	—
Market (1,000 head) 1/	37,240	37,875	36,920	38,455	39,865	36,920	34,940	37,360	39,070	—
Farrowings (1,000 head)	9,370	9,203	8,989	2,324	2,190	2,013	2,458	2,266	2,252	—
Pig crop (1,000 head)	72,268	71,807	—	18,167	18,890	15,748	19,578	17,922	—	—

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Prior to 1984, 8–14 lb.; 1984 & 1985, 14–17 lb.; beginning 1988, 14–18 lb. 4/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 5/ Quarters are Dec. of preceding year—Feb. (I), Mar.—May (II), June–Aug. (III), & Sept.–Nov. (IV). 6/ Intentions.
 *Classes estimated. NQ = not quote. — = not available.

Note: *This series replaces the Choice steer beef price, 600–700 lb., which was discontinued with the June number. The new number is the value of Choice beef from a yield grade 1–3, 550–700 lb. carcass.

Information contact: Polly Cochran (202) 219-0767.

Crops & Products

Table 17.—Supply & Utilization^{1,2}

	Area				Production	Total supply ^{4/}	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price ^{5/}
	Set aside ^{3/}	Planted	Harvested	Yield								
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
Wheat												
1985/86	18.8	75.6	64.7	37.5	2,424	3,865	284	787	909	1,990	1,905	3.08
1986/87	21.0	72.1	60.7	34.4	2,091	4,017	401	796	999	2,196	1,821	2.42
1987/88	23.9	65.8	58.0	37.7	2,108	3,945	280	806	1,598	2,684	1,261	2.57
1988/89*	22.6	65.6	53.2	34.1	1,812	3,096	157	818	1,419	2,394	702	3.72
1989/90*	9.6	76.0	62.1	32.7	2,037	2,762	160	832	1,233	2,225	536	3.72
1990/91*	7.1	77.3	69.4	39.6	2,739	3,310	450	853	1,025	2,328	982	2.65-2.65
Rice												
	Mil. acres		Lb./acre					Mil. cwt (rough equiv.)				\$/cwt
1985/86	1.24	2.51	2.49	5,814	134.9	201.8	—	6/ 65.8	58.7	124.5	77.3	6.53
1986/87	1.48	2.38	2.36	5,851	133.4	213.3	—	6/ 77.7	84.2	181.9	51.4	3.75
1987/88	1.57	2.36	2.33	5,555	129.6	184.0	—	6/ 80.4	72.2	162.8	31.4	7.27
1988/89*	1.09	2.93	2.90	5,514	159.9	195.0	—	6/ 82.3	85.9	168.2	26.7	6.83
1989/90*	1.21	2.73	2.69	5,749	154.5	185.4	—	6/ 82.4	76.8	159.2	26.3	7.35
1990/91*	1.03	2.89	2.81	5,507	154.9	186.0	—	6/ 88.8	73.0	161.8	24.2	6.25-7.25
Corn												
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
1985/86	5.4	83.4	75.2	118.0	8,875	10,534	4,107	1,180	1,227	6,494	4,040	2.23
1986/87	14.3	76.7	68.9	119.4	8,226	12,267	4,701	1,192	1,492	7,325	4,882	1.50
1987/88	23.1	65.2	59.6	119.8	7,131	12,016	4,812	1,229	1,718	7,757	4,259	1.94
1988/89*	20.6	67.7	58.3	84.6	4,929	9,191	3,987	1,245	2,028	7,260	1,930	2.64
1989/90*	10.8	72.3	64.8	116.2	7,525	9,458	4,456	1,290	2,367	8,113	1,344	2.36
1990/91*	10.1	74.2	67.0	118.6	7,933	9,280	4,850	1,320	1,850	8,020	1,260	2.20-2.40
Sorghum												
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
1985/86	0.9	18.3	16.8	66.8	1,120	1,420	664	28	178	869	551	1.93
1986/87	3.0	15.3	13.9	67.7	938	1,489	635	12	198	746	743	1.37
1987/88	4.1	11.8	10.6	69.4	731	1,474	655	25	231	811	663	1.70
1988/89*	3.9	10.3	9.0	63.8	577	1,239	468	22	310	800	440	2.27
1989/90*	3.3	12.6	11.2	55.4	615	1,055	513	15	307	835	220	2.10
1990/91*	3.0	10.7	9.1	62.9	571	791	580	15	200	715	76	2.05-2.25
Barley												
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
1985/86	0.7	13.2	11.8	61.0	591	848	333	169	22	823	325	1.98
1986/87	2.1	13.1	12.0	60.8	611	944	298	174	137	606	336	1.61
1987/88	2.9	11.0	9.9	62.4	521	889	254	174	120	548	321	1.81
1988/89*	2.8	9.8	7.6	38.0	290	622	166	180	79	425	190	2.80
1989/90*	2.3	9.2	8.3	46.6	404	615	185	180	89	454	161	2.42
1990/91*	2.6	8.3	7.5	55.9	419	590	175	185	90	450	140	2.10-2.20
Oats												
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
1985/86	0.1	13.3	8.2	63.7	521	728	480	82	2	544	184	1.23
1986/87	0.6	14.7	6.9	66.3	386	603	395	73	3	471	133	1.21
1987/88	0.8	18.0	8.9	64.0	374	552	358	81	1	440	112	1.56
1988/89*	0.3	13.9	5.5	39.3	218	393	194	100	1	294	98	2.61
1989/90*	0.4	12.1	6.9	64.3	374	544	272	115	1	387	157	1.49
1990/91*	0.2	10.4	5.9	60.1	357	574	330	120	1	450	124	1.10-1.20
Soybeans												
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
1985/86	0	63.1	61.6	34.1	2,099	2,415	0	1,053	740	1,879	536	5.05
1986/87	0	60.4	58.3	33.3	1,940	2,476	0	1,179	757	2,040	438	4.78
1987/88	0	58.2	57.2	33.9	1,938	2,374	0	1,174	892	2,072	302	5.58
1988/89*	0	58.8	57.4	27.0	1,549	1,855	0	1,058	527	1,673	182	7.42
1989/90*	0	60.8	59.6	32.3	1,924	2,109	0	1,146	823	1,870	239	6.70
1990/91*	0	57.8	56.6	34.0	1,922	2,153	0	1,180	565	1,843	320	5.40-6.00
Soybean oil												
								Mil. lbs.				¢/Cwt./lb.
1985/86	—	—	—	—	11,617	12,257	—	10,053	1,257	11,310	947	16.00
1986/87	—	—	—	—	12,783	13,745	—	10,833	1,187	12,020	1,725	15.40
1987/88	—	—	—	—	12,974	14,895	—	10,930	1,873	12,803	2,092	22.65
1988/89*	—	—	—	—	11,737	13,967	—	10,591	1,661	12,252	1,715	21.10
1989/90*	—	—	—	—	13,004	14,741	—	12,083	1,353	13,436	1,305	22.30
1990/91*	—	—	—	—	13,125	14,450	—	12,000	1,100	13,100	1,350	21.0-23.0
Soybean meal												
								1,000 tons				¢/\$/ton
1985/86	—	—	—	—	24,951	25,338	—	19,090	6,036	25,126	212	155
1986/87	—	—	—	—	27,758	27,970	—	20,387	7,343	27,730	240	163
1987/88	—	—	—	—	26,660	28,300	—	21,293	6,854	28,147	153	222
1988/89*	—	—	—	—	24,843	25,100	—	19,839	5,288	24,927	173	233
1989/90*	—	—	—	—	27,719	27,900	—	22,558	5,024	27,582	318	174
1990/91*	—	—	—	—	28,027	28,350	—	23,000	5,000	28,000	300	160-170

See footnotes at end of table.

Table 17.—Supply & Utilization, continued

	Area		Harvested	Yield	Production	Total supply 4/	Feed and resid- uel	Other domes- tic use	Ex- ports	Total use	Ending Stocks	Farm price 5/
	Set Aside 3/	Planted										
	Mil. acres			Lb./acre				Mil. bales				
Cotton 10/												
1985/86	3.8	10.7	10.2	630	13.4	17.6	—	6.4	2.0	8.4	9.4	56.50
1986/87	4.2	10.0	8.5	552	9.7	19.1	—	7.4	6.7	14.1	5.0	52.40
1987/88	3.9	10.4	10.0	706	14.8	19.8	—	7.6	6.6	14.2	5.8	64.30
1988/89*	2.2	12.5	12.0	819	15.4	21.2	—	7.6	6.2	13.9	7.1	56.80
1989/90*	3.5	10.6	9.5	814	12.2	19.3	—	8.0	7.7	16.4	3.0	66.20
1990/91*	1.9	12.4	11.7	840	15.8	18.6	—	6.4	6.0	10.4	2.0	—

*February 11, 1991 Supply & Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, & oats, August 1 for cotton & rice, September 1 for soybeans, corn, & sorghum, October 1 for soybean meal & soybean oil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 35,7437 bushels of wheat or soybeans, 39,3879 bushels of corn or sorghum, 45,9296 bushels of barley, 66,8944 bushels of oats, 22,048 cwt of rice, & 4.59 480-pound bales of cotton. 3/ Includes diversion, PIK, acreage reduction, 50-92, & 0-92 programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding & Government purchases. 6/ Residual included in domestic use. 7/ Average of crude soybean oil, Decatur. 8/ Includes 196 million pounds in imports for 1987/88, 138 million in 1988/89, 15 million in 1989/90, & 50 million in 1990/91. 9/ Average of 44 percent, Decatur. 10/ Upland & extra long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply & use estimates & changes in ending stocks. — = not available or not applicable.

Information contact: Commodity Economics Division, Crops Branch (202) 219-0840.

Table 18.—Food Grains

	Marketing year 1/				1989		1990			
	1986/87	1987/88	1988/89	1989/90	Dec	Aug	Sept	Oct	Nov	Dec
Wholesale prices										
Wheat, No. 1 HRW.										
Kansas City (\$/bu.) 2/	2.72	2.96	4.17	4.22	4.39	2.89	2.83	2.81	2.78	2.78
Wheat, DNS,										
Minneapolis (\$/bu.) 3/	3.07	3.16	4.36	4.18	4.23	3.05	2.84	2.85	2.80	2.82
Rice, S.W. La. (\$/cwt) 4/	10.25	19.25	14.85	15.55	14.65	14.65	13.95	13.75	14.50	14.50
Wheat										
Exports (mil. bu.)	1,004	1,592	1,424	1,233	85	96	109	88	81	81
Milled (mil. bu.)	755	753	778	759	59	74	87	75	73	64
Wheat flour production (mil. cwt)	335	336	348	347	26	33	30	33	33	29
Rice										
Exports (mil. cwt, rough equiv.)	84.2	72.2	85.9	76.8	9.0	4.5	6.5	9.0	8.4	—

	Marketing year 1/			1989			1990			
	1987/88	1988/89	1989/90	Mar-May	June-Aug	Sept-Nov	Dec-Feb	Mar-May	June-Aug	Sept-Nov
Wheat										
Stocks, beginning (mil. bu.)	1,821	1,261	702	1,227.7	701.6	1,917.2	1,423.7	943.1	539.5	2,409.5
Domestic use										
Food (mil. bu.)	721	715	731	185.0	183.1	183.1	180.5	184.3	197.4	211.9
Seed, feed & residual (mil. bu.) 5/	385	280	251	-2.8	273.9	-12.8	44.9	-44.9	408.0	23.5
Exports (mil. bu.)	1,598	1,419	1,233	368.0	369.9	328.8	259.7	274.8	288.1	276.0

1/ Beginning June 1 for wheat & August 1 for rice. 2/ Ordinary protein. 3/ 14% protein. 4/ Long grain, milled basis. 5/ Residual includes feed use. — = not available.

Information contacts: Ed Allen & Janet Livezey (202) 219-0840.

Table 19.—Cotton

	Marketing year 1/				1989		1990			
	1986/87	1987/88	1988/89	1989/90	Dec	Aug	Sept	Oct	Nov	Dec
U.S. Price, SLM,										
1-1/16 in. (cts./lb.) 2/	53.2	63.1	57.7	69.8	63.6	76.3	71.0	70.5	69.5	69.9
Northern Europe prices										
Index (cts./lb.) 3/	62.0	72.7	66.4	82.3	77.3	81.0	81.4	81.5	82.72	83.00
U.S. M 1-3/32 in. (cts./lb.) 4/	61.8	76.3	69.2	83.6	76.3	80.5	81.7	82.4	83.20	84.00
U.S. mill consumpt. (1,000 bales)	7,452	7,817	7,782	8,759	579	829	692	802	887	490
Exports (1,000 bales)	6,684	6,582	6,148	7,694	682	544	412	377	718	—
Stocks, beginning (1,000 bales)	9,348	5,026	5,771	7,092	12,551	3,000	2,224	3,207	7,498	10,880

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Cotton (A) index; average of five lowest prices of 11 selected growths. 4/ Memphis territory growths. — = not available.

Information contact: Scott Sanford (202) 219-0840.

Table 20.—Feed Grains

	Marketing year 1/				1989	1990				
	1986/87	1987/88	1988/89	1989/90	Dec	Aug	Sept	Oct	Nov	Dec
Wholesale prices										
Corn, no. 2 yellow, 30 day, Chicago (\$/bu.)	1.64	2.14	2.68	2.53	2.34	2.52	2.33	2.24	2.33	2.33
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	2.73	3.40	4.16	4.16	3.98	4.27	3.89	3.79	3.85	3.97
Barley, feed, Duluth (\$/bu.) 2/	1.44	1.78	2.31	2.20	2.23	1.99	2.01	2.11	2.16	2.07
Barley, malting, Minneapolis (\$/bu.)	1.89	2.04	4.11	3.20	3.19	2.35	2.32	2.30	2.40	2.31
Exports 3/										
Corn (mil. bu.)	1,504	1,723	2,028	2,367	258	153	106	108	168	142
Feed grains (mil. metric tons) 4/	46.3	52.3	61.3	69.9	7.3	4.7	3.2	3.5	5.0	4.3
	Marketing year 1/				1989		1990			
	1986/87	1987/88	1988/89	1989/90	June-Aug	Sept-Nov	Dec-Feb	Mar-May	June-Aug	Sept-Nov
Corn										
Stocks, beginning (mil. bu.)	4,040	4,882	4,259	1,930	3,419	1,930	7,082	4,812	2,843	1,344.5
Domestic use										
Feed (mil. bu.)	4,714	4,805	3,979	4,456	690	1,484	1,291	1,014	656	1,648
Food, seed, ind. (mil. bu.)	1,192	1,229	1,245	1,271	330	298	297	338	338	305
Exports (mil. bu.)	1,504	1,723	2,038	2,367	470	582	682	601	502	385
Total use (mil. bu.)	7,410	7,757	7,260	8,114	1,490	2,374	2,270	1,970	1,499	2,338

1/ September 1 for corn & sorghum; June 1 for oats & barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Includes products. 4/ Aggregated data for corn, sorghum, oats, & barley. — = not available.

Information contact: James Cole (202) 219-0840.

Table 21.—Fats & Oils

	Marketing year *				1989	1990				
	1986/86	1986/87	1987/88	1988/89	Nov	July	Aug	Sept	Oct	Nov
Soybeans										
Wholesale price, no. 1 yellow, Chicago (\$/bu.)	6.20	6.03	6.67	7.41	5.76	6.05	6.06	6.19	6.09	5.72
Crushings (mil. bu.)	1,052.8	1,178.8	1,174.5	1,057.7	104.1	92.2	92.8	92.1	106.1	106.0
Exports (mil. bu.)	740.7	756.9	801.6	530.6	76.7	20.8	28.3	27.9	29.8	62.8
Stocks, beginning (mil. bu.)	316.0	536.4	436.4	302.5	96.3	58.8	46.9	45.2	34.5	130.1
Soybean oil										
Wholesale price, crude, Decatur (cts./lb.)	18.02	15.36	22.67	21.09	19.50	23.5	25.0	24.5	22.6	21.1
Production (mil. lb.)	11,617.3	12,783.1	12,974.5	11,737.0	1,145.4	1,038.0	1,059.2	1,038.1	1,188.1	1,188.0
Domestic disp. (mil. lb.)	10,045.9	10,820.2	10,734.1	10,455.6	1,045.4	903.9	1,029.8	795.1	1,211.3	956.6
Exports (mil. lb.)	1,257.3	1,184.5	1,873.2	1,658.2	82.5	122.6	82.5	298.9	85.4	107.2
Stocks, beginning (mil. lb.)	632.5	946.6	1,725.0	2,092.2	1,514.6	1,421.7	1,433.2	1,380.2	1,324.6	1,215.9
Soybean meal										
Wholesale price, 44% protein, Decatur (\$/ton)	154.88	162.61	221.90	233.46	183.40	171.32	172.40	176.90	172.50	163.00
Production (1,000 ton)	24,951.3	27,758.8	28,060.2	24,942.7	2,492.5	2,196.8	2,237.1	2,187.3	2,385.5	2,388.0
Domestic disp. (1,000 ton)	19,117.2	20,387.4	21,275.9	19,792.5	2,147.4	1,903.0	1,955.9	1,855.8	2,220.3	2,081.6
Exports (1,000 ton)	6,009.3	7,343.0	6,871.0	5,130.8	371.4	288.4	316.9	245.3	289.2	500.7
Stocks, beginning (1,000 ton)	386.9	211.7	240.2	153.5	267.8	262.5	267.7	232.9	318.3	220.6
Margarine, wholesale price, Chicago, white (cts./lb.)										
	51.2	40.3	40.3	52.3	52.1	63.6	62.5	61.9	61.7	51.5

* Beginning September 1 for soybeans; October 1 for soybean meal & oil; calendar year for margarine.

Information contacts: Roger Hoskin (202) 219-0840, Tom Bickerton (202) 219-0824.

Table 22.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Loan rate	Findley loan rate	Payment rates		PIK	Base acres 1/	Program 2/	Participation rate 3/
				Deficiency	Paid land diversion				
						Percent 4/	Mil. acres		Percent of base
Wheat									
			\$/bu.						
1984/85	4.38	3.30	—	1.00	2.70	85	94.0	20/10/10-20	80/80/20
1985/86	4.38	3.30	—	1.08	2.70	—	94.0	20/10/0	73
1986/87 5/	4.38	3.00	2.40	1.98	2.00	1.10	91.6	22.5/2.5/5-10	85/85/21
1987/88	4.38	2.85	2.28	1.81	—	—	87.6	27.5/0/0	88
1988/89	4.23	2.78	2.21	0.69	—	—	84.8	27.5/0/0	88
1989/90	4.10	2.58	2.08	7/ 0.32	—	—	82.3	10/0/0	78
1990/91	4.00	2.44	1.95	1.00	—	—	80.5	5/0/0	80
Rice									
			\$/cwt						
1984/85	11.90	8.00	—	3.76	—	—	4.1	25/0/0	85
1985/86	11.90	8.00	6/ 3.18	3.90	3.60	—	4.2	20/15/0	90
1986/87 5/	11.90	7.20	6/ 3.82	4.70	—	—	4.2	35/0/0	94
1987/88	11.68	6.84	6/ 5.77	4.82	—	—	4.1	35/0/0	96
1988/89	11.15	6.83	6/ 8.30	4.31	—	—	4.1	25/0/0	94
1989/90	10.80	6.50	6/ 6.60	3.56	—	—	4.1	25/0/0	95
1990/91	10.71	6.50	—	3.71	—	—	4.2	20/0/0	92
Corn									
			\$/bu.						
1984/85	3.03	2.55	—	0.43	—	—	80.8	10/0/0	54
1985/86	3.03	2.55	—	0.48	—	—	84.2	10/0/0	69
1986/87 5/	3.03	2.40	1.92	1.11	—	—	81.7	17.5/2.5/0	88
1987/88	3.03	2.28	1.82	1.09	2.00	—	81.5	20/15/0	90
1988/89	2.93	2.21	1.77	7/ 0.36	1.75	—	82.9	20/10/0; 0/92	87
1989/90	2.84	2.06	1.65	7/ 0.58	—	—	82.7	10/0/0; 0/92	80
1990/91	2.75	1.96	1.57	0.16	—	—	82.7	10/0/0; 0/92	76
Sorghum									
			\$/bu.						
1984/85	2.88	2.42	—	0.46	—	—	18.4	8/ (same)	42
1985/86	2.88	2.42	—	0.48	—	—	19.3	—	55
1986/87 5/	2.88	2.28	1.82	1.08	0.65	—	19.0	—	75
1987/88	2.88	2.17	1.74	0.82	1.90	—	17.4	—	84
1988/89	2.78	2.10	1.65	0.48	1.65	—	18.8	—	82
1989/90	2.70	1.96	1.57	7/ 0.66	—	—	16.2	—	71
1990/91	2.61	1.86	1.49	0.21	—	—	15.4	—	75
Barley									
			\$/bu.						
1984/85	2.60	2.08	—	0.26	—	—	11.6	8/ (same)	44
1985/86	2.60	2.08	—	0.52	—	—	13.3	—	57
1986/87 5/	2.60	1.95	1.56	0.99	0.57	—	12.4	—	72
1987/88	2.60	1.86	1.49	0.52	1.60	—	12.5	—	84
1988/89	2.51	1.80	1.44	1.04	1.40	—	12.5	—	79
1989/90	2.43	1.68	1.34	7/ 0.23	—	—	12.4	—	69
1990/91	2.36	1.60	1.28	0.26	—	—	11.9	—	66
Oats									
			\$/bu.						
1984/85	1.60	1.31	—	0.00	—	—	9.8	8/ (same)	14
1985/86	1.60	1.31	—	0.29	—	—	9.4	—	14
1986/87 5/	1.60	1.23	0.99	0.39	0.36	—	9.2	—	37
1987/88	1.60	1.17	0.94	0.20	0.80	—	8.4	—	45
1988/89	1.55	1.13	0.90	0.30	—	—	7.9	5/0/0; 0/92	30
1989/90	1.50	1.06	0.85	0.00	—	—	7.6	5/0/0; 0/92	23
1990/91	1.45	1.01	0.81	0.00	—	—	7.5	5/0/0; 0/92	10
Soybeans 9/									
			\$/bu.						
1984/85	—	5.02	—	—	—	—	—	—	—
1985/86	—	5.02	—	—	—	—	—	—	—
1986/87 5/	—	4.77	—	—	—	—	—	—	—
1987/88	—	4.77	—	—	—	—	—	—	—
1988/89	—	4.77	—	—	—	—	—	—	—
1989/90	—	4.53	—	—	—	—	—	10/ 10/25	—
1990/91	—	4.60	—	—	—	—	—	10/ 0/25	—
Upland cotton									
			Cts/lb.						
1984/85	81.0	55.00	—	18.60	—	—	15.6	25/0/0	70
1985/86	81.0	57.30	—	23.70	30.00	—	15.9	20/10/0	82/0/0
1986/87 5/	81.0	55.00	11/ 44.00	26.00	—	—	15.6	25/0/0	93
1987/88	79.4	52.25	12/ —	17.3	—	—	14.5	25/0/0	93
1988/89	75.9	51.80	12/ —	19.4	—	—	14.5	12.5/0/0	89
1989/90	73.4	50.00	12/ —	13.1	—	—	14.6	25/0/0	89
1990/91	72.9	50.27	12/ —	6.3	—	—	14.5	12.5/0/0	88

1/ Includes planted area plus acres considered planted (ARP, PLD, 0-92 etc). Net of CRP. 2/ Percentage of base acres that farmers participating in Acreage Reduction Programs/Paid Land Diversion/PIK were required to devote to conserving uses to receive program benefits. 3/ Percentage of base acres enrolled in Acreage Reduction Programs/Paid Land Diversion/PIK. 4/ Percent of program yield, except 1986/87 wheat, which is dollars per bushel. 1984 PIK rates apply only to the 10-20 portion. 5/ Rates for payments received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 6/ Annual average world market price. 7/ Guaranteed to farmers signed up for 0/92. 8/ The sorghum, oats, & barley programs were the same as for corn in each year except 1988-90, when the oats ARP was lower than for the other feed grains. 9/ There are no target prices, acreage programs, or payment rates for soybeans. 10/ Soybean program data refer to percent of program crop base permitted to shift into beans without loss of base. 11/ Loan repayment rate. 12/ Loans may be repaid at the lower of the loan rate or world market prices. *On September 13, the Secretary announced that participating farmers have the option of planting up to 105 percent of their wheat base to boost 1990 supplies. For every acre planted in excess of 96 percent of base, the acreage used to compute deficiency payments will be cut by 1 acre. — = not available.

Information contact: James Cote (202) 219-0840.

Table 23.—Fruit

	1982	1983	1984	1985	1986	1987	1988	1989	1990 P
Citrus 1/ Production (1,000 ton)	12,139	13,682	10,832	10,525	11,058	11,993	12,761	13,186	10,699
Per capita consumpt. (lbs.) 2/	24.7	29.4	24.0	22.6	26.0	25.7	27.1	24.4	—
Noncitrus 3/ Production (1,000 tons)	14,658	14,168	14,301	14,191	13,874	16,011	15,303	15,763	14,629
Per capita consumpt. (lbs.) 2/	62.7	63.6	67.5	66.5	69.5	75.1	71.9	72.2	—
1990									
	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
F.o.b. shipping point prices									
Apples (\$/carton) 4/	11.00	11.00	11.28	13.85	19.88	11.96	12.16	13.00	13.08
Pears (\$/box) 5/	14.00	14.00	15.88	—	—	—	—	12.56	13.00
Grower prices									
Oranges (\$/box) 6/	7.20	7.84	7.15	6.02	5.07	5.31	4.48	6.31	6.18
Grapefruit (\$/box) 6/	7.57	7.82	8.74	6.35	6.44	7.22	6.51	5.53	5.63
Stocks, ending									
Fresh apples (mil. lbs.)	1,004.3	589.8	283.9	118.9	8.8	3,005	4,500.0	4,003.7	3,358.3
Fresh pears (mil. lbs.)	63.0	26.9	2.3	33.8	199.8	578.0	449.6	322.6	287.0
Frozen fruits (mil. lbs.)	591.0	583.7	653.2	790.8	859.5	864.5	912.7	864.5	818.6
Frozen orange juice (mil. lbs.)	1,170.0	1,586.2	1,074.8	1,008.1	808.4	797.1	802.0	871.3	1,033.9

1/ 1990 indicated 1989/90 season. 2/ Fresh per capita consumption. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton try pack, 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135's. 6/ U.S. equivalent on-tree returns. P = preliminary. — = not available.

Information contact: Wynne Napper (202) 219-0884.

Table 24.—Vegetables

	Calendar year									
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 P
Production										
Total vegetables (1,000 cwt)	392,343	430,795	403,509	456,334	453,030	448,829	476,381	468,779	542,437	557,088
Fresh (1,000 cwt) 1/ 3/	183,456	193,451	185,782	201,817	203,549	203,185	220,539	228,397	239,281	234,506
Processed (tons) 2/ 3/	10,444,330	11,867,170	10,886,350	12,725,880	12,474,040	12,273,200	12,892,100	12,019,110	15,157,790	16,129,080
Mushrooms (1,000 lbs.)	517,146	490,826	561,531	595,681	587,956	614,393	631,819	667,759	715,010	—
Potatoes (1,000 cwt)	340,623	355,131	333,726	382,039	406,609	381,743	389,320	356,438	370,444	393,867
Sweetpotatoes (1,000 cwt)	12,799	14,833	12,083	12,902	14,573	12,368	11,611	10,945	11,358	13,020
Dry edible beans (1,000 cwt)	32,751	25,563	15,520	21,070	22,175	22,886	26,031	19,253	23,729	32,429
1990										
	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Shipments										
Fresh (1,000 cwt) 4/	19,860	22,476	35,292	30,291	21,826	22,032	14,898	20,451	17,623	17,112
Potatoes (1,000 cwt)	12,095	12,809	16,062	10,136	8,255	10,029	8,959	11,947	11,405	10,434
Sweetpotatoes (1,000 cwt)	251	331	268	167	109	101	302	582	929	545

1/ Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 2/ Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, & cauliflower. 3/ Asparagus & cucumber estimates were not available for 1982 & 1983. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, & watermelons. — = not available.

Information contacts: Gary Lucier or Cathy Greens (202) 219-0884.

Table 25.—Other Commodities

	Annual					1989					1990				
	1986	1987	1988	1989	1990	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec	1987	1988	1989	June	June
Sugar															
Production 1/	6,257	7,309	7,087	6,840	6,319	3,709	1,671	572	652	3,424					
Deliveries 1/	7,766	8,167	8,188	8,309	8,631	2,190	1,968	2,048	2,308	2,307					
Stocks, ending 1/	3,225	3,195	3,132	2,948	2,642	2,933	3,112	2,165	1,210	2,642					
Coffee															
Composite green price N.Y. (cts/lb.)	185.18	109.14	115.59	95.17	—	63.70	73.22	79.55	79.10	76.65					
Imports, green bean equiv. (mil. lbs.) 2/	2,596	2,638	2,072	2,630	—	725	866	702	539	776					
1990															
	1987	1988	1989	June	Jan	Feb	Mar	Apr	May	June					
Tobacco															
Prices at auctions 3/															
Flue-cured (\$/lb.)	1.59	1.61	—	—	—	—	—	—	—	—					
Burley (\$/lb.)	1.56	1.61	—	—	1.68	1.67	—	—	—	—					
Domestic consumption 4/															
Cigarettes (bil.)	575.0	582.5	640.1	26.8	38.4	41.1	48.5	45.3	47.2	45.9					
Large cigars (mil.)	2,728	2,631	2,467.6	158.5	165.5	164.3	198.5	174.2	205.0	221.6					

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green & processed coffee. 3/ Crop year July-June for flue-cured, Oct.-Sept. for burley. 4/ Taxable removals. — = not available.

Information contacts: Sugar, Peter Buzzanell (202) 219-0886, coffee, Fred Gray (202) 219-0888, tobacco, Verner Gries (202) 219-0890.

World Agriculture

Table 26.—World Supply & Utilization of Major Crops, Livestock, & Products

	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90 P	1990/91 F
	Million units						
Wheat							
Area (hectares)	231.2	229.6	228.2	220.0	218.0	225.8	230.8
Production (metric tons)	511.9	500.1	530.7	502.3	500.4	536.8	589.0
Exports (metric tons) 1/	107.0	85.0	90.7	105.0	96.8	96.1	93.9
Consumption (metric tons) 2/	493.0	466.2	522.6	530.2	531.9	534.7	562.9
Ending stocks (metric tons) 3/	184.4	168.2	178.4	146.5	117.0	119.1	145.3
Coarse grains							
Area (hectares)	334.6	341.3	336.5	324.3	325.9	322.0	321.5
Production (metric tons)	815.8	843.1	831.8	793.9	731.2	803.5	825.8
Exports (metric tons) 1/	100.4	83.2	83.3	83.2	94.6	99.5	85.4
Consumption (metric tons) 2/	782.8	778.8	806.0	814.9	796.5	828.2	827.8
Ending stocks (metric tons) 3/	143.9	208.2	234.0	213.0	147.7	123.0	121.0
Rice, milled							
Area (hectares)	144.2	144.9	145.2	141.5	145.5	148.8	148.4
Production (metric tons)	318.9	318.9	318.7	314.0	330.8	344.5	349.9
Exports (metric tons) 4/	11.3	12.6	12.9	11.9	15.1	12.2	12.5
Consumption (metric tons) 2/	310.2	319.4	322.7	319.8	326.8	337.6	346.4
Ending stocks (metric tons) 3/	56.0	55.4	61.4	45.6	47.6	54.6	58.0
Total grains							
Area (hectares)	710.0	715.8	709.9	685.8	689.4	694.4	698.7
Production (metric tons)	1,646.6	1,662.1	1,681.2	1,610.2	1,562.4	1,684.8	1,764.7
Exports (metric tons) 1/	218.7	180.8	186.9	200.1	206.4	207.8	191.8
Consumption (metric tons) 2/	1,585.8	1,594.4	1,651.2	1,664.9	1,657.2	1,700.5	1,737.1
Ending stocks (metric tons) 3/	364.3	431.8	461.8	407.1	312.3	296.6	324.3
Oilseeds							
Crush (metric tons)	150.7	155.1	161.4	167.7	166.1	173.1	177.3
Production (metric tons)	191.1	196.2	194.4	209.5	203.6	213.9	217.0
Exports (metric tons)	33.1	34.5	37.7	39.6	32.0	35.7	34.1
Ending stocks (metric tons)	21.1	26.8	23.3	24.0	22.2	23.2	23.1
Meals							
Production (metric tons)	101.8	105.0	110.5	115.1	112.1	117.7	120.0
Exports (metric tons)	32.3	34.4	36.7	36.2	38.2	38.3	38.8
Oils							
Production (metric tons)	46.2	49.4	50.3	53.2	53.7	57.3	68.3
Exports (metric tons)	15.6	16.4	16.9	17.7	16.4	19.6	19.0
Cotton							
Area (hectares)	34.0	31.7	29.6	31.1	33.8	32.0	33.6
Production (bales)	89.0	80.8	70.9	81.2	84.7	80.0	66.1
Exports (bales)	20.2	20.3	26.0	23.3	26.1	24.0	24.1
Consumption (bales)	70.2	77.3	82.8	84.5	85.6	87.3	86.8
Ending stocks (bales)	43.0	47.0	34.7	31.8	30.2	23.8	22.7
	1985	1986	1987	1988	1989	1990 P	1991 F
Red meat							
Production (metric tons)	103.8	106.5	109.6	113.4	115.2	114.4	116.1
Consumption (metric tons)	101.5	105.4	107.9	111.7	113.8	113.8	115.0
Exports (metric tons) 1/	6.3	6.7	6.6	6.9	7.2	6.6	6.9
Poultry 5/							
Production (metric tons)	26.2	29.3	31.3	32.9	34.1	35.7	37.2
Consumption (metric tons)	25.8	28.9	30.8	32.5	33.8	35.2	36.8
Exports (metric tons) 1/	1.2	1.2	1.5	1.7	1.8	2.0	2.1
Dairy							
Milk production (metric tons)	413.4	425.9	425.9	429.1	434.8	441.1	443.4

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year date. 1985 data correspond with 1984/85, etc. 5/ Poultry excludes the Peoples Republic of China before 1986. P = preliminary. F = forecast.

Information contacts: Crops, Frederic Surtis (202) 219-0313; red meat & poultry, Linda Bailey (202) 219-1285; dairy, Sara Short (202) 219-0770.

U.S. Agricultural Trade

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1990						
	1988	1989	1990	Dec	July	Aug	Sept	Oct	Nov	Dec
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	3.97	4.65	3.72	4.62	3.41	3.21	3.14	3.18	3.09	3.10
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	2.73	2.85	2.79	2.79	2.93	2.80	2.60	2.55	2.56	2.63
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	2.52	2.70	2.65	2.65	2.79	2.67	2.52	2.50	2.51	2.60
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	7.81	7.06	6.24	6.22	6.32	6.42	6.45	6.33	6.09	6.13
Soybean oil, Decatur (cts./lb.)	23.52	20.21	22.75	19.10	24.54	24.78	23.89	22.09	20.75	21.28
Soybean meal, Decatur (\$/ton)	234.75	216.59	199.37	179.82	171.30	171.09	175.79	172.49	163.81	164.79
Cotton, 8-market avg. spot (cts./lb.)	57.25	63.78	71.25	63.58	79.53	78.27	71.01	70.54	66.48	69.92
Tobacco, avg. price at auction (cts./lb.)	153.61	151.56	164.81	161.00	161.00	159.51	170.20	168.82	169.86	170.09
Rice, f.o.b. mill, Houston (\$/cwt)	19.00	15.68	15.52	15.67	18.25	15.81	14.50	14.50	14.50	14.50
Inedible tallow, Chicago (cts./lb.)	16.64	14.71	13.54	14.25	13.50	10.12	12.00	13.25	14.09	14.25
Import commodities										
Coffee, N.Y. spot (\$/lb.)	1.21	1.04	0.81	0.70	0.75	0.81	0.87	0.85	0.80	0.82
Rubber, N.Y. spot (cts./lb.)	59.20	50.65	48.28	44.82	45.80	47.46	48.43	46.50	46.28	47.03
Cocoa beans, N.Y. (\$/lb.)	0.69	0.55	0.55	0.42	0.58	0.55	0.59	0.57	0.58	0.56

Information contact: Mary Teymourian (202) 219-0824.

Table 28.—Indexes of Real Trade-Weighted Dollar Exchange Rates¹

	1990										1991
	Mar	Apr	May P	June P	July P	Aug P	Sept P	Oct P	Nov P	Dec P	Jan P
	1985 = 100										
Total U.S. trade 2/	68.6	67.9	66.8	67.3	65.5	83.4	63.1	81.2	60.4	61.2	60.3
Agricultural trade											
U.S. markets	79.3	79.4	78.5	78.9	79.2	79.1	78.5	76.6	76.1	77.0	76.6
U.S. competitors	79.6	79.2	77.8	77.5	76.4	76.1	76.3	76.0	75.9	76.3	76.3
Wheat											
U.S. markets	89.1	89.9	89.6	90.3	93.5	96.4	96.2	94.5	94.3	95.3	96.1
U.S. competitors	80.6	78.4	78.4	75.8	73.4	72.5	72.8	72.7	73.2	73.6	73.4
Soybeans											
U.S. markets	70.6	70.4	69.4	69.7	68.3	66.9	66.1	64.1	63.4	64.4	63.5
U.S. competitors	77.3	75.6	69.2	66.9	63.9	64.3	64.7	64.9	65.1	65.3	65.5
Corn											
U.S. markets	74.3	74.8	73.3	73.8	74.6	73.7	72.2	69.9	69.5	70.7	69.9
U.S. competitors	85.6	81.6	75.8	74.5	71.1	70.2	70.4	69.7	69.4	70.3	70.0
Cotton											
U.S. markets	77.7	78.0	76.8	77.4	76.4	75.9	74.8	73.2	73.0	74.2	73.7
U.S. competitors	83.7	83.6	83.0	81.5	88.3	89.9	89.2	88.1	88.2	85.3	85.0

^{1/} Real indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of Agricultural Outlook for a discussion of the calculations and the weights used. ^{2/} Federal Reserve Board Index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets. P = preliminary.

Information contact: Tim Baxter, David Stallings (202) 219-0718.

Table 29.—Trade Balance

	Fiscal year 1/								Nov
	1984	1985	1986	1987	1988	1989	1990	1991 F	1990
	\$ million								
Exports									
Agricultural	38,027	31,201	28,312	27,876	35,316	39,637	40,182	38,500	3,500
Nonagricultural	170,014	179,236	179,291	202,911	258,656	301,222	325,928	—	28,172
Total 2/	208,041	210,437	205,603	230,787	293,972	340,859	366,110	—	31,672
Imports									
Agricultural	18,916	19,740	20,884	20,650	21,014	21,477	22,514	22,000	1,901
Nonagricultural	297,736	313,722	342,846	387,374	409,138	441,074	458,147	—	41,872
Total 3/	316,652	333,462	363,730	388,024	430,152	462,551	480,661	—	43,573
Trade balance									
Agricultural	19,111	11,461	5,428	7,226	14,302	18,160	17,668	16,500	1,599
Nonagricultural	-127,722	-134,486	-163,555	-164,463	-150,482	-139,852	-132,219	—	-13,500
Total	-108,611	-123,025	-158,127	-157,237	-136,180	-121,692	-114,551	—	-11,901

^{1/} Fiscal years begin October 1 & end September 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. ^{2/} Domestic exports including Department of Defense shipments (F.A.S. value). ^{3/} Imports for consumption (customs value). F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 30.—U.S. Agricultural Exports & Imports

	Fiscal year*			Nov	Fiscal year*			Nov
	1989	1990 F	1991 F	1990	1989	1990 F	1991 F	1990
	1,000 units				\$ million			
EXPORTS								
Animals, live (no.) 1/	758	685	—	65	476	361	—	26
Meats & preps., excl. poultry (mt)	869	878	2/ 700	81	2,355	2,457	—	245
Dairy products (mt) 1/	192	92	—	1	476	348	500	19
Poultry meats (mt)	428	567	600	52	510	631	—	58
Fats, oils, & greases (mt)	1,377	1,264	1,200	96	531	459	—	33
Hides & skins incl. furskins	—	—	—	—	1,713	1,796	—	135
Cattle hides, whole (no.) 1/	28,260	24,777	—	2,070	1,360	1,365	—	111
Mink pelts (no.) 1/	3,073	5,128	—	56	91	116	—	1
Grains & feeds (mt)	114,992	112,987	—	8,477	16,829	15,694	3/13,800	1,070
Wheat (mt)	37,641	27,999	27,500	2,103	6,004	4,209	4/3,300	235
Wheat flour (mt)	1,178	882	1,200	69	255	203	—	14
Rice (mt)	3,041	2,501	2,400	263	955	829	800	73
Feed grains, incl. products (mt)	60,958	69,510	59,800	5,009	7,374	8,093	7,000	535
Feeds & fodders (mt)	11,088	11,125	5/11,900	957	1,849	1,826	—	158
Other grain products (mt)	790	970	—	76	514	665	—	54
Fruits, nuts, & preps. (mt)	2,555	2,873	—	296	2,394	2,789	—	296
Fruit juices incl.	—	—	—	—	—	—	—	—
froz. (1,000 hectoliters) 1/	4,997	5,975	—	486	264	328	—	26
Vegetables & preps. (mt)	1,665	2,243	—	279	1,542	2,079	—	250
Tobacco, unmanufactured (mt)	212	220	200	28	1,274	1,373	1,400	181
Cotton, excl. linters (mt)	1,441	1,666	1,600	156	2,040	2,704	2,700	269
Seeds (mt)	511	576	—	28	507	576	600	56
Sugar, cane or beet (mt)	388	447	—	61	134	187	—	23
Oilseeds & products (mt)	21,052	23,772	—	2,315	6,629	6,098	6,200	578
Oilseeds (mt)	14,592	17,703	—	1,748	4,363	4,246	—	426
Soybeans (mt)	14,093	17,217	16,600	1,708	4,085	3,939	3,900	399
Protein meal (mt)	4,963	4,767	—	500	1,358	1,022	—	102
Vegetable oils (mt)	1,498	1,302	—	66	908	830	—	49
Essential oils (mt)	13	14	—	1	171	182	—	12
Other	106	89	—	11	1,802	2,120	—	221
Total	145,481	147,686	139,500	11,880	39,637	40,182	38,500	3,500
IMPORTS								
Animals, live (no.) 1/	2,485	2,940	—	337	740	1,053	1,100	124
Meats & preps., excl. poultry (mt)	1,091	1,142	—	98	2,432	2,848	—	251
Beef & veal (mt)	668	754	750	64	1,525	1,842	1,800	158
Pork (mt)	371	340	370	29	778	888	900	82
Dairy products (mt) 1/	211	254	—	22	834	951	900	85
Poultry & products 1/	—	—	—	—	130	129	—	11
Fats, oils, & greases (mt)	14	19	—	2	14	15	—	2
Hides & skins, incl. furskins 1/	—	—	—	—	241	135	—	7
Wool, unmanufactured (mt)	82	47	—	5	319	187	—	18
Grains & feeds (mt)	3,467	3,471	3,450	343	1,139	1,181	1,000	117
Fruits, nuts, & preps., excl. juices (mt)	5,036	5,331	5,050	374	2,269	2,486	—	194
Bananas & plantains (mt)	3,039	3,236	3,200	256	851	926	900	73
Fruit juices (1,000 hectoliters) 1/	27,747	33,922	30,000	2,432	792	1,001	—	81
Vegetables & preps. (mt)	2,217	2,242	—	147	1,959	2,264	2,000	150
Tobacco, unmanufactured (mt)	169	193	180	13	521	588	600	43
Cotton, unmanufactured (mt)	13	30	—	1	8	20	—	1
Seeds (mt)	158	171	170	6	187	164	200	12
Nursery stock & cut flowers 1/	—	—	—	—	468	519	—	81
Sugar, cane or beet (mt)	1,657	1,769	—	160	620	734	—	70
Oilseeds & products (mt)	1,917	2,034	—	162	946	964	1,000	78
Oilseeds (mt)	424	534	—	44	159	206	—	15
Protein meal (mt)	359	310	—	36	65	48	—	5
Vegetable oils (mt)	1,133	1,189	—	82	721	710	—	55
Beverages excl. fruit juices (1,000 hectoliters) 1/	13,967	13,543	—	1,248	1,815	1,867	—	214
Coffee, tea, cocoa, spices	1,867	2,202	3,200	135	3,896	3,465	—	231
Coffee, incl. products (mt)	1,084	1,290	1,300	71	2,467	1,997	2,000	115
Cocoa beans & products (mt)	564	698	670	47	969	1,042	1,000	81
Rubber & allied gums (mt)	927	840	850	82	1,051	712	700	69
Other	—	—	—	—	1,097	1,229	—	105
Total	—	—	—	—	21,477	22,514	22,000	1,901

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. 1/ Not included in total volume and also other dairy products for 1989 & 1990. 2/ Forecasts for footnoted items 2/—6/ are based on slightly different groups of commodities. Fiscal 1990 exports of categories used in the 1991 forecasts were 2/ 676,000 m. tons, 3/ 18,014 million, 4/ 4,426 million l.e. includes flour, 5/ 11,065 million m. tons. F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 31.—U.S. Agricultural Exports by Region

	Fiscal year*			Nov 1990	Change from year* earlier			Nov 1990
	1989	1990 F	1991 F		1989	1990 F	1991 F	
	\$ million				Percent			
WESTERN EUROPE	7,074	7,331	7,300	754	-12	4	0	-3
European Community (EC-12)	6,565	6,838	6,800	709	-12	4	0	-4
Belgium-Luxembourg	431	431	—	55	1	0	—	-22
France	474	489	—	64	-18	-1	—	93
Germany, Fed. Rep.	918	1,096	—	114	-28	19	—	-30
Italy	609	704	—	68	-15	16	—	-20
Netherlands	1,847	1,837	—	199	-12	-11	—	25
United Kingdom	736	761	—	68	-10	3	—	-8
Portugal	307	338	—	29	-10	10	—	18
Spain, Incl. Canary Islands	876	991	—	90	3	13	—	13
Other Western Europe	510	493	500	45	-2	-3	0	6
Switzerland	166	171	—	14	-14	3	—	-9
EASTERN EUROPE	422	533	500	62	-24	28	0	209
German Dem. Rep.	72	58	—	0	8	-20	—	-100
Poland	45	101	—	11	-73	127	—	80
Yugoslavia	78	129	—	22	-26	69	—	1,434
Romania	62	210	—	10	-33	239	—	122
USSR	3,299	3,989	2,000	77	70	-9	-33	-80
ASIA	18,677	18,131	17,400	1,572	17	-3	-4	-5
West Asia (Mideast)	2,273	1,995	2,000	137	19	-12	0	-18
Turkey	238	259	—	24	97	9	—	-10
Iraq	791	497	0	0	8	-37	-100	-100
Israel, Incl. Gaza & W. Bank	331	285	—	22	-1	-14	—	-11
Saudi Arabia	482	502	800	56	4	4	20	38
South Asia	1,161	729	—	35	44	-37	—	-44
Bangladesh	213	125	—	1	98	-41	—	-70
India	243	115	—	5	-31	-53	—	-54
Pakistan	599	391	300	20	117	-35	-25	-47
China	1,496	909	800	37	144	-39	-33	-28
Japan	8,148	8,108	8,100	748	12	-1	0	-3
Southeast Asia	976	1,184	—	106	-4	21	—	-11
Indonesia	216	277	—	22	-9	28	—	-30
Philippines	344	351	400	22	0	2	0	-45
Other East Asia	4,823	5,207	4,900	510	7	13	-8	5
Taiwan	1,594	1,818	1,600	180	1	14	-11	-4
Korea, Rep.	2,453	2,703	2,800	288	9	10	-4	13
Hong Kong	575	685	700	61	18	19	0	1
AFRICA	2,280	2,009	1,800	200	0	-12	-10	15
North Africa	1,796	1,524	1,400	166	8	-15	-7	16
Morocco	216	166	—	10	12	-23	—	-53
Algeria	549	488	800	82	2	-11	20	84
Egypt	955	761	800	89	21	-20	0	3
Sub-Saharan	483	484	400	35	-21	0	0	8
Nigeria	30	32	—	6	-31	7	—	75
Rep. S. Africa	57	81	—	6	-34	43	—	-2
LATIN AMERICA & CARIBBEAN	5,437	5,156	5,300	444	24	-5	2	-2
Brazil	149	105	100	35	-15	-30	0	173
Caribbean Islands	1,007	1,006	—	104	16	0	—	17
Central America	448	464	—	29	8	4	—	-39
Colombia	139	147	—	8	-22	6	—	-59
Mexico	2,755	2,666	2,800	208	60	-3	4	-3
Peru	81	187	—	11	-54	132	—	-68
Venezuela	587	345	400	30	-2	-41	33	40
CANADA	2,179	3,716	4,000	353	10	71	8	117
OCEANIA	268	317	300	38	13	18	0	38
Total	39,637	40,182	38,500	3,500	12	1	-4	-4
Developed countries	17,997	19,780	20,100	1,915	1	10	5	9
Less developed countries	16,423	15,970	15,300	1,410	14	-3	-4	-2
Centrally planned countries	5,217	4,431	3,100	176	68	-15	-30	-62

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. F = forecast. — = not available.
 Note: Adjusted for transshipments through Canada.

Information contact: Stephen MacDonald (202) 219-0822.

Farm Income

Table 32.—Farm Income Statistics

	Calendar year										
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F	1991 F
	\$ billion										
1. Farm receipts	144.1	147.2	141.3	147.1	149.4	140.2	147.5	155.9	166.5	174	177 to 182
Crops (incl. net CCC loans)	72.5	72.3	67.2	69.9	74.3	63.7	65.6	71.4	75.4	77	78 to 82
Livestock	69.2	70.3	69.6	72.9	69.8	71.5	76.0	78.8	83.7	91	89 to 93
Farm related 1/	2.5	4.6	4.5	4.3	5.3	5.0	5.9	5.7	7.4	6	6 to 7
2. Direct Government payments	1.9	3.5	9.3	8.4	7.7	11.8	18.7	14.5	10.9	9	8 to 9
Cash payments	1.9	3.5	4.1	4.0	7.6	8.1	6.6	7.1	9.1	9	7 to 8
Value of PLK commodity	0.0	0.0	5.2	4.5	0.1	3.7	10.1	7.4	1.7	1	0 to 1
3. Total gross farm income (4+5+6) 2/	166.3	163.5	153.2	170.2	162.9	156.5	166.0	173.8	189.2	193	195 to 200
4. Gross cash income (1+2)	146.0	150.6	150.8	155.5	157.2	162.0	164.3	170.4	177.6	184	185 to 190
5. Nonmoney income 3/	13.8	14.3	13.5	8.7	8.0	6.9	7.5	7.5	7.3	8	7 to 8
6. Value of inventory change	6.5	-1.4	-10.9	6.0	-2.3	-2.4	-2.8	-4.1	4.4	3	1 to 4
7. Cash expenses 4/	113.2	112.8	111.0	119.0	109.3	105.2	108.2	112.3	122.8	125	127 to 133
8. Total expenses	139.4	140.0	137.9	143.8	131.9	125.5	127.7	132.1	142.6	145	149 to 154
9. Net cash income (4-7)	32.8	37.9	39.5	36.6	47.9	46.7	58.1	58.1	54.6	59	55 to 60
10. Net farm income (3-8)	26.9	23.5	18.3	26.3	31.0	31.0	41.3	41.8	45.7	49	44 to 49
Deflated (1982\$)	28.9	23.5	14.7	24.5	27.9	27.3	35.2	34.4	38.9	37	31 to 35
11. Off-farm income	35.8	36.4	37.0	39.2	55.2	54.5	58.9	57.7	57.5	—	—
12. Loan charges 5/: Real estate	9.0	3.8	2.3	-2.0	-6.4	-8.7	-7.7	-4.1	-2.1	—	—
13. 5/: Non-real estate	6.5	3.4	0.9	-0.8	-9.6	-11.0	-4.6	-0.3	0.1	—	—
14. Rental income plus monetary change	6.4	6.4	5.4	9.2	9.1	8.0	6.8	7.5	8.2	—	—
15. Capital expenditures 6/	16.8	13.3	12.7	12.5	9.2	8.5	11.1	11.1	13.0	—	—
16. Net cash flow (9+12+13+14-15)	37.8	38.2	35.3	30.4	31.9	26.6	39.5	50.2	48.0	—	—

1/ Income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, & farm household expenses. 5/ Excludes farm households. Total may not add because of rounding. F = forecast. — = not available.

Information contact: Diane Bertelsen (202) 219-0809.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/										
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F	1991 F
	\$ billion										
Assets											
Real estate	784.7	748.8	758.2	610.3	540.8	507.3	525.4	555.4	577.6	595	600 to 610
Non-real estate	197.7	196.4	191.9	196.9	187.5	182.8	193.7	208.1	216.3	223	220 to 230
Livestock & poultry	53.5	53.0	49.5	49.5	45.3	47.8	58.0	65.5	69.7	74	74 to 78
Machinery & motor vehicles	87.0	87.5	87.4	86.0	83.5	81.9	79.4	80.6	83.8	86	85 to 89
Crops stored 2/	29.0	26.1	24.0	26.2	22.9	16.7	18.0	23.0	23.5	23	21 to 25
Purchased inputs	—	—	—	2.6	1.3	2.0	3.3	3.4	2.8	3	2 to 4
Financial assets	28.2	29.7	30.9	32.6	33.3	34.5	35.1	35.4	36.6	38	36 to 40
Total farm assets	982.4	945.2	950.1	807.2	728.3	690.1	719.1	763.5	793.9	818	825 to 835
Liabilities											
Real estate debt 3/	98.7	102.5	104.8	102.8	96.4	87.7	79.9	75.8	73.8	72	70 to 74
Non-real estate debt 4/	83.6	87.0	87.9	87.1	77.5	66.6	62.0	61.7	61.8	62	60 to 64
Total farm debt	182.3	189.5	192.7	189.9	173.9	154.2	142.0	137.6	135.6	134	131 to 137
Total farm equity	800.1	755.7	757.4	617.4	554.3	535.9	577.2	625.9	658.3	684	695 to 705
	Percent										
Selected ratios											
Debt-to-assets	18.6	20.0	20.3	23.5	23.9	22.4	19.7	18.0	17.1	16	16 to 17
Debt-to-equity	22.8	25.1	25.4	30.8	31.4	28.8	24.6	22.0	20.6	20	19 to 20
Debt-to-net cash income	558	500	488	519	363	330	253	237	248	228	230 to 240

1/ As of Dec. 31. 2/ Non-COC crops held on farms plus value above loan rates for crops held under COC. 3/ Excludes debt on operator dwellings, but includes COC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 219-0796.

Table 34.—Cash Receipts From Farm Marketings, by State

Region & State	Livestock & products				Crops 1/				Total 1/			
	1988	1989	Oct 1990	Nov 1990	1988	1989	Oct 1990	Nov 1990	1988	1989	Oct 1990	Nov 1990
	\$ million 2/											
NORTH ATLANTIC												
Maine	217	215	17	17	197	233	18	26	414	447	35	43
New Hampshire	59	63	5	5	77	79	6	5	136	142	11	11
Vermont	351	375	32	29	51	51	3	4	401	426	35	33
Massachusetts	105	112	9	9	305	317	30	42	410	429	39	51
Rhode Island	13	13	1	1	86	86	4	4	79	79	5	5
Connecticut	183	188	16	17	214	218	17	16	398	404	33	33
New York	1,803	1,948	166	157	865	911	92	81	2,868	2,857	257	239
New Jersey	193	197	17	17	452	463	41	42	645	660	56	59
Pennsylvania	2,332	2,595	220	206	984	988	92	108	3,296	3,581	318	313
NORTH CENTRAL												
Ohio	1,584	1,668	171	160	1,980	2,114	438	304	3,564	3,812	810	483
Indiana	1,716	1,817	184	191	2,320	2,502	635	195	4,036	4,318	819	387
Illinois	2,255	2,252	213	212	3,927	4,458	1,002	526	6,182	6,710	1,216	738
Michigan	1,205	1,313	123	112	1,535	1,627	208	247	2,739	2,940	331	358
Wisconsin	4,215	4,337	342	327	764	941	133	147	4,980	5,278	477	474
Minnesota	3,418	3,716	369	357	2,849	2,809	384	365	6,067	6,526	753	722
Iowa	4,888	5,209	576	567	3,787	3,911	798	518	8,775	9,119	1,372	1,103
Missouri	2,012	2,168	219	270	1,748	1,732	293	190	3,758	3,900	512	460
North Dakota	851	642	106	99	1,807	1,485	205	257	2,358	2,108	311	356
South Dakota	2,050	2,108	280	271	895	884	228	104	2,945	2,992	506	375
Nebraska	5,390	5,643	523	567	2,409	2,878	436	473	7,800	8,521	959	1,040
Kansas	4,124	4,245	377	342	2,195	2,079	317	236	6,320	6,324	693	579
SOUTHERN												
Delaware	444	503	35	31	152	180	39	21	595	663	75	52
Maryland	768	870	58	57	457	476	77	66	1,224	1,346	135	123
Virginia	1,300	1,372	173	144	614	685	165	79	1,914	2,058	342	225
West Virginia	218	250	29	24	68	64	5	7	286	314	34	32
North Carolina	2,188	2,505	230	233	1,850	2,046	487	179	4,038	4,551	744	415
South Carolina	490	551	55	53	616	675	81	51	1,108	1,225	135	104
Georgia	2,016	2,270	169	154	1,554	1,598	272	130	3,570	3,899	443	284
Florida	1,132	1,221	117	113	4,688	4,982	168	226	5,820	6,203	287	340
Kentucky	1,530	1,670	136	280	980	1,258	74	338	2,510	2,928	210	628
Tennessee	1,056	1,060	105	97	877	881	125	169	1,933	1,921	228	287
Alabama	1,695	1,932	153	132	728	896	111	80	2,422	2,828	265	212
Mississippi	1,172	1,292	110	88	1,133	1,000	209	240	2,305	2,292	318	329
Arkansas	2,280	2,661	219	191	1,552	1,470	347	378	3,831	4,131	566	568
Louisiana	582	614	57	52	1,295	1,048	240	252	1,876	1,661	297	304
Oklahoma	2,243	2,409	331	222	1,112	1,185	120	98	3,354	3,594	445	318
Texas	6,562	6,863	691	672	3,689	3,897	454	481	10,251	10,760	1,150	1,158
WESTERN												
Montana	816	999	167	183	617	710	60	90	1,433	1,610	227	273
Idaho	1,039	1,046	98	95	1,285	1,670	254	233	2,324	2,715	352	329
Wyoming	584	669	151	123	177	188	10	46	761	856	162	169
Colorado	2,666	2,649	284	268	1,034	1,250	111	187	3,700	3,899	396	435
New Mexico	909	974	149	181	375	450	50	54	1,283	1,424	198	235
Arizona	792	744	74	54	1,177	1,158	57	96	1,969	1,902	131	150
Utah	528	574	60	62	173	174	17	13	701	748	78	74
Nevada	159	141	15	9	79	94	9	11	238	235	24	20
Washington	1,140	1,201	106	97	2,196	2,438	293	252	3,336	3,839	407	353
Oregon	673	739	84	88	1,508	1,558	218	176	2,182	2,297	302	284
California	4,682	5,093	437	396	11,970	12,422	1,649	1,569	16,652	17,515	2,075	1,885
Alaska	10	9	1	1	20	20	2	2	30	29	3	3
Hawaii	89	92	8	8	490	495	45	43	579	587	53	51
UNITED STATES	78,821	83,724	8,276	8,063	71,372	75,449	11,125	9,468	150,192	159,173	19,401	17,531

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding.

Information contact: Roger Strickland (202) 219-0806.

Table 35.—Cash Receipts From Farming

	Annual						1989	1990				
	1984	1985	1986	1987	1988	1989	Nov	July	Aug	Sept	Oct	Nov
	\$ million											
Farm marketings & CCC loans*	142,784	144,114	135,197	141,653	150,192	159,173	16,752	12,901	13,270	14,620	19,401	17,531
Livestock & products	72,895	69,822	71,539	76,010	78,821	83,724	8,031	7,289	7,471	7,709	8,276	8,063
Meat animals	40,750	38,550	39,081	44,478	45,884	46,691	4,645	3,901	4,293	4,571	5,307	5,034
Dairy products	17,931	18,066	17,724	17,727	17,841	19,401	1,780	1,816	1,756	1,661	1,583	1,494
Poultry & eggs	12,245	11,209	12,701	11,517	12,807	15,348	1,298	1,193	1,257	1,268	1,231	1,228
Other	1,968	2,008	2,034	2,288	2,429	2,386	311	379	185	209	155	309
Crops	69,889	74,293	63,658	65,843	71,372	75,449	8,720	5,612	5,799	6,911	11,125	9,468
Food grains	9,731	8,990	5,741	5,780	7,484	8,073	893	1,390	940	755	790	723
Feed crops	16,138	22,591	16,912	14,543	14,305	16,656	1,889	1,204	1,298	1,103	2,890	2,335
Cotton (lint & seed)	3,574	3,887	3,371	4,189	4,546	4,740	928	117	230	329	716	1,033
Tobacco	2,813	2,699	1,921	1,826	1,960	2,381	376	181	404	444	387	387
Oil-bearing crops	13,841	12,475	10,614	11,294	13,537	12,172	1,822	454	542	1,098	3,160	1,983
Vegetables & melons	9,152	8,572	8,849	9,889	9,754	11,340	575	788	1,044	1,266	1,183	563
Fruits & tree nuts	6,734	6,946	7,248	8,058	9,139	9,020	1,085	859	707	950	1,049	1,184
Other	8,008	8,333	9,002	10,064	10,665	11,068	1,553	639	638	986	979	1,579
Government payments	8,430	7,704	11,813	16,747	14,480	10,887	1,066	51	98	119	24	1,825
Total	161,214	151,818	147,010	158,400	164,672	170,060	17,818	12,952	13,368	14,739	19,425	19,156

* Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 219-0806.

Table 36.—Farm Production Expenses

	Calendar year									
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F
	\$ million									
Feed	20,855	18,592	20,371	20,239	17,247	17,875	17,958	20,620	22,722	22,000
Livestock	8,999	9,684	8,818	9,488	9,184	9,758	11,842	12,812	12,883	13,000
Seed	3,428	3,172	2,890	3,388	3,128	3,188	3,259	3,268	3,733	4,000
Farm-origin inputs	33,282	31,447	31,879	33,112	29,559	30,821	33,059	36,700	39,438	40,000
Fertilizer	9,409	8,018	6,959	8,574	7,506	8,813	6,453	6,775	7,554	7,000
Fuels & oils	6,570	7,734	7,211	7,296	6,438	5,310	4,957	4,921	5,321	6,000
Electricity	1,747	2,041	1,982	2,060	1,878	1,785	2,156	2,231	2,100	2,000
Pesticides	4,201	4,282	3,870	4,688	4,334	4,324	4,512	4,443	5,721	6,000
Manufactured inputs	23,927	22,076	20,022	22,618	20,153	18,242	18,077	18,370	20,897	21,000
Short-term interest	10,722	11,349	10,615	10,396	8,735	7,920	7,305	7,287	7,480	7,000
Real estate interest 1/	9,142	10,481	10,815	10,733	9,878	9,131	8,187	7,885	7,643	7,000
Total interest charges	19,864	21,830	21,430	21,129	18,613	17,052	15,492	15,172	15,123	14,000
Repair & maintenance 1/2/	7,021	6,428	6,529	6,730	6,556	6,485	6,828	6,889	7,794	8,000
Contract & hired labor	8,931	10,075	9,725	9,729	9,789	9,890	10,821	11,202	11,887	12,000
Machine hire & custom work	1,984	2,025	2,213	2,566	2,354	2,099	2,105	2,271	2,739	3,000
Marketing, storage, & transportation	3,523	4,301	3,904	4,012	4,127	3,652	3,988	3,281	4,214	5,000
Misc. operating expenses 1/	6,909	7,262	6,089	9,136	8,198	8,054	8,902	9,357	9,857	10,000
Other operating expenses	28,369	30,089	31,481	32,173	31,034	30,180	32,644	33,000	36,491	38,000
Capital consumption 1/	23,573	24,287	23,973	21,623	19,648	17,709	16,475	16,716	17,319	18,000
Taxes 1/	4,246	4,050	4,123	4,188	4,484	4,549	4,982	5,090	5,328	5,000
Net rent to nonoperator landlord	5,184	6,174	5,110	8,978	8,435	6,951	6,984	7,014	8,181	8,000
Other overhead expenses	34,003	34,511	33,106	34,787	32,567	29,209	28,420	28,820	30,819	32,000
Total production expenses	139,444	139,954	137,897	143,819	131,926	126,503	127,893	132,063	142,566	145,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses include other livestock purchases & dairy assessments. Totals may not add because of rounding. F = forecast.

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Table 37.—CCC Net Outlays by Commodity & Function

COMMODITY/PROGRAM	Fiscal year									
	1983	1984	1985	1986	1987	1988	1989	1990	1991 E	1992 E
	\$ million									
Feed grains										
Corn	5,720	-934	4,403	10,524	12,346	8,227	2,863	2,450	2,364	2,665
Grain sorghum	814	76	463	1,185	1,203	764	467	361	298	262
Barley	268	89	336	471	394	67	45	-93	53	125
Oats	11	5	2	26	17	-2	1	-6	14	16
Corn & oat products	2	8	7	6	7	7	8	8	5	6
Total feed grains	6,816	-758	5,211	12,211	13,967	9,053	3,384	2,721	2,737	3,073
Wheat	3,419	2,536	4,691	3,440	2,836	678	53	806	2,847	2,519
Rice	664	333	990	847	906	128	631	667	818	775
Upland cotton	1,383	244	1,553	2,142	1,786	666	1,461	-79	369	623
Tobacco	880	348	455	253	-346	-453	-367	-307	-217	-85
Dairy	2,528	1,502	2,065	2,337	1,166	1,295	679	505	685	392
Soybeans	288	-685	711	1,597	-476	-1,676	-86	8	22	-21
Peanute	-6	1	12	32	8	7	13	1	3	-3
Sugar	49	10	164	214	-65	-246	-25	16	0	-26
Honey	48	90	81	89	73	100	42	47	46	25
Wool	84	132	109	123	152	1/ 5	93	104	175	175
Operating expense 3/	328	362	346	457	535	614	620	616	721	773
Interest expenditure	3,525	1,064	1,435	1,411	1,219	425	98	632	604	480
Export programs 4/	398	743	134	102	276	200	-102	-34	1,256	1,053
1989/90 Disaster/										
Livestock Assistance	0	0	0	0	0	0	3,919 2/	161	81	0
Other	-1,542	1,295	-314	486	371	1,665	110	609	890	1,126
Total	18,851	7,315	17,683	25,841	22,408	12,461	10,523	6,471	10,844	11,079
FUNCTION										
Price-support loans (net)	8,438	-27	6,272	13,628	12,199	4,579	-926	-399	201	458
Direct payments 5/										
Deficiency	2,780	612	6,302	6,166	4,833	3,071	5,796	4,178	6,117	6,574
Diversion	705	1,504	1,525	64	362	8	-1	0	0	0
Dairy termination	0	0	0	489	587	260	168	169	100	11
Other	0	0	0	27	60	0	42	3	12	12
Disaster	115	1	0	0	0	6	4	0	0	0
Total direct payments	3,600	2,117	7,827	6,746	5,862	4,246	6,011	4,370	6,229	6,597
1988/89 crop disaster	0	0	0	0	0	0	3,386 2/	5	5	0
Emergency livestock/										
forage assistance	0	0	0	0	0	31	533	156	86	0
Purchases (net)	2,540	1,470	1,331	1,670	-479	-1,131	116	-48	381	512
Producer storage										
payments	664	268	329	485	632	658	174	185	26	0
Processing, storage,										
& transportation	665	639	657	1,013	1,859	1,113	659	317	305	202
Operating expense 3/	328	362	346	457	535	614	620	616	721	773
Interest expenditure	3,525	1,064	1,435	1,411	1,219	425	98	632	604	480
Export programs 4/	398	743	134	102	276	200	-102	-34	1,256	1,053
Other	-1,607	679	-648	329	305	1,727	-48	669	1,030	1,004
Total	18,851	7,315	17,683	25,841	22,408	12,461	10,523	6,471	10,844	11,079

1/ Fiscal 1988 wool & mohair program outlays were \$130,635,000 but include a one-time advance appropriation of \$126,108,000, which was recorded as a wool program receipt by Treasury. 2/ Approximately \$1.5 billion in benefits to farmers under the Disaster Assistance Act of 1989 were paid in generic certificates & were not recorded directly as disaster assistance outlays. 3/ Does not include CCC Transfers to General Sales Manager. 4/ Includes Export Guarantee Program, Export Guarantee Program—Credit Reform, Direct Export Credit Program, Market Promotion Program, & CCC Transfers to the General Sales Manager. 5/ Includes cash payments only. Excludes payment-in-kind in fiscal 83-85 & generic certificates in fiscal 86-90. E = Estimated in the fiscal 1992 President's Budget based on November, 1990 supply & demand estimates. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdalski (202) 447-5148.

Food Expenditures

Table 38.—Food Expenditure Estimates

	Annual			1990			1990 year-to-date		
	1988	1989	1990 P	Oct	Nov P	Dec P	Oct	Nov P	Dec P
	\$ billion								
Sales 1/ Off-premises use 2/ Meals & snacks 3/	257.881 196.630	276.244 203.599	290.730 213.639	24.1 17.9	24.3 17.2	26.3 17.7	240.1 178.7	264.4 195.9	290.7 213.8
	1989 \$ billion								
Sales 1/ Off-premises use 2/ Meals & snacks 3/	273.947 202.533	276.372 203.565	272.788 203.956	22.4 16.9	22.6 16.2	24.4 16.6	225.6 178.7	248.3 195.9	272.8 213.8
	Percent change from year earlier (\$ bil.)								
Sales 1/ Off-premises use 2/ Meals & snacks 3/	-4.9 9.7	7.1 5.1	5.2 4.9	5.9 3.8	5.0 5.0	2.9 3.9	5.5 5.0	-5.5 5.0	5.2 4.9
	Percent change from year earlier (1989 \$ bil.)								
Sales 1/ Off-premises use 2/ Meals & snacks 3/	0.3 3.8	0.9 0.5	-1.3 0.2	0.2 -0.7	-1.9 0.4	0.6 -0.6	-1.1 0.2	-1.2 0.3	-1.3 0.2

1/ Food only (excludes alcoholic beverages). Not seasonally adjusted. 2/ Excludes donations & home production. 3/ Excludes donations, child nutrition subsidies, & meals furnished to employees, patients, & inmates. P = preliminary.

NOTE: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food not alcoholic beverages & pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced & consumed on farms & food furnished to employees; (4) this series includes all sales of meals & snacks. PCE includes only purchases using personal funds, excluding business travel & entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," Agr.-Econ. Rpt. No. 575, Aug 1987.

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Transportation

Table 39.—Rail Rates; Grain & Fruit/Vegetable Shipments

	Annual			1989	1990					
	1987	1988	1989	Oct	May	June	July	Aug	Sept	Oct
Rail freight rate index 1/ (Dec. 1984=100)										
All products	100.1	104.8	108.4	106.8	107.1	107.1	107.0 P	107.1 P	107.1 P	107.9 P
Farm products	99.3	105.6	108.4	108.2	109.9	109.5	109.5 P	110.7 P	111.7 P	112.1 P
Grain	98.7	105.4	108.7	108.1	109.7	109.2	109.0 P	110.5 P	111.0 P	111.4 P
Food products	98.6	103.2	103.9	104.1	105.2	104.9	104.3 P	104.4 P	104.4 P	105.5 P
Grain shipments										
Rail carloadings (1,000 cars) 2/	29.0	30.7	28.4	29.0	25.8 P	27.9 P	25.6 P	26.8 P	24.9 P	27.1 P
Fresh fruit & vegetable shipments										
Piggy back (1,000 cwt) 3/ 4/	588	535	504	408	598	572	438	338	409	320
Rail (1,000 cwt) 3/ 4/	560	607	599	480	590	802	414	183	394	423
Truck (1,000 cwt) 3/ 4/	9,137	9,679	9,738	9,121	11,646	12,749	9,981	9,038	8,669	9,082
Cost of operating trucks hauling produce 5/										
Owner operator (cts./mile)	116.3	118.7	124.1	125.5	127.2	126.4	126.8	133.9	135.4	138.2
Fleet operation (cts./mile)	116.5	118.4	123.4	124.5	126.7	125.8	126.7	135.5	135.1	137.5

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1989 & 1990. 5/ Office of Transportation, USDA. P = preliminary.

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Indicators of Farm Productivity

Table 40.—Indexes of Farm Production, Input Use, & Productivity

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 2/
	1977=100									
Farm output	118	116	96	112	118	111	110	102	114	117
All livestock products 3/	109	107	109	107	110	110	113	116	116	117
Meat animals	106	101	104	101	102	100	102	105	104	101
Dairy products	108	110	114	110	117	116	116	118	117	120
Poultry & eggs	119	119	120	123	128	133	144	146	153	166
All crops 4/	117	117	88	111	118	109	108	92	107	112
Feed grains	121	122	67	116	134	123	106	73	108	112
Hay & forage	106	109	100	107	106	106	102	99	101	101
Food grains	144	138	117	129	121	107	107	98	107	136
Sugar crops	107	96	93	95	97	106	111	105	105	106
Cotton	109	85	55	91	94	69	103	107	86	102
Tobacco	108	104	75	90	81	63	62	72	71	84
Oil crops	114	121	91	106	117	110	108	89	106	102
Cropland used for crops	102	101	88	99	98	94	88	86	90	—
Crop production per acre	115	116	100	112	120	116	123	107	119	—
Farm input 5/	102	99	96	96	92	89	89	87	88	—
Farm real estate	104	102	101	99	97	96	95	94	96	—
Mechanical power & machinery	98	92	89	86	80	77	73	72	73	—
Agricultural chemicals	129	118	102	120	115	109	111	111	122	—
Feed, seed, & livestock purchases	108	107	103	106	102	110	117	110	119	—
Farm output per unit of input	116	117	99	117	126	124	124	117	128	—
Output per hour of labor:										
Farm 6/	123	125	99	121	139	139	142	134	146	—
Nonfarm 7/	100	99	102	105	106	108	109	111	112	—

1/ For historical data & indexes, see Economic Indicators of the Farm Sector: Production & Efficiency Statistics, 1986, ECIFS 5-6. 2/ Preliminary indexes for 1990 based on Crop Production: 1990 Summary, released in January 1991, & unpublished data from the Agricultural Statistics Board, NASS. 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output. 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown. It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown. 6/ Economic Research Service. 7/ Bureau of Labor Statistics. — = not available.

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